ack'd

SHROPSHIRE EDUCATION COMMITTEE

School Health Service

REPORT

OF THE

Principal School Medical Officer

1970

COUNTY HEALTH DEPARTMENT, SHIREHALL, SHREWSBURY
MAY, 1971

INDEX

To The Chairman and Members of the Shropshire Education Committee

MR. CHAIRMAN, LADIES AND GENTLEMEN,

I have the honour to present the Annual Report of the Principal School Medical Officer for the year 1970.

The report contains an account of the contributions made by the various members of our School Health team. The fact that we are a team must be emphasised; there are many disciplines and professions which have a worthwhile part to play in the service. They range from the doctors and dentists to the teachers and administrative staffs of the Education and Health Departments and also include many others whose contributions will be found in the pages of the report.

Many activities are recorded, some of which may appear routine but nevertheless play a very important part in the continued maintenance of the health of the school population.

Reference has been made in previous years to the value of early ascertainment in the prevention of disease rather than diagnosis and treatment at a later age when treatment inevitably will be more difficult, more protracted and needless to say more expensive.

From January 1970 a scheme was commenced for assessing the vision and hearing of infants in the county. Appointments were sent to parents to attend with their children at specific times at clinics near their homes. The results were of considerable interest; only 60% of the appointments were kept despite a preliminary visit by the health visitor explaining the value and the importance of these procedures. Further health education is obviously necessary to ensure a higher attendance.

Health Education is a rapidly expanding part of our work. Topics which are firm favourites at the moment and for which we get frequent requests are alcoholism, drug dependence, venereal disease, and interpersonal relationships (our "Learning to Live" programme). We receive requests for these from schools and from many other sources. Details of the actual work carried out can be found on page 50.

The rise in the incidence of the sexually transmitted diseases, the continuing self-inflicted ill-health caused by smoking cigarettes, and the increasing abuse of alcohol and drugs are serious public health problems.

The reduction of these hazards is essential, and this presents a complicated and difficult problem to solve. There is an increasing demand for information from parents and teachers and community leaders. An improved knowledge of these groups enables them to deal with problems as they arise. Senior pupils in schools and technical colleges, young farmers' clubs and youth clubs are involved in "the scene" and need factual and accurate information to enable them to make their own judgements when subjected to the pressures to experiment and to escape from reality.

A professional approach to health education is essential and treatment of these subjects needs to be as a whole and not on an individual basis. A series of lectures is arranged in a teachers' training college, an approved school and senior schools, in order to present the whole picture, and includes personal relationships and the social aspects, as well as the health aspects.

Diseases caused by individual self-abuse and affected by personal behaviour, are subject to the attitudes of society and are affected by national and international views.

Regard must be taken of many influences acting on the individual, and health education will play an increasingly important part as one of the influences. An active health education section is using the latest information and the best visual aids available to increase public knowledge in this field, and to play a part in prevention of self inflicted disease which has come to represent a major public health problem.

Once again it must be said that one of the more important contributions that can be made to the welfare of the school population is the availability to the children and to the parents of skilled medical advice and counselling. Sessions are given specifically at very regular intervals for doctors to get in touch with the teaching staff of schools and with children and their parents to discuss any problems which may arise that affect the wellbeing of the child.

Another new development during the year is the availability of a vaccine against german measles or rubella; this is provided free at present by the Department of Health and is recommended for girls aged between 11 and 14 years. The response of parents has not been as great as expected. The consequences of german measles on expectant mothers during the early months of their pregnancy can be disastrous. Congenital defects in the newborn directly attributable to the infection include impaired hearing, congenital heart disease and congenital cataract amongst others. It is to be hoped that the parents of all girls aged 11-14 years, who have not acquired a natural immunity by having an attack of german measles, will avail themselves of this service.

At the time of writing, the future of the School Health Service is under active discussion. Proposals for the reorganisation of Local Government in England and Wales have been put forward by the Government, whilst at the same time it is suggested that the National Health Service be unified outside local authority control, these changes to be contemporaneous. The Local Authority Associations have agreed, albeit reluctantly, that the School Health Service should be transferred to the new National Health Service stating that safeguards must be written into whatever arrangements are made to ensure a high level of service.

The advantages of the School Health Service being part of the National Health Service are many. Child Health requires a team approach and the hospital based paediatric consultant, the general practitioner and the local authority medical officer have much to contribute.

As a recent paper from the Society of Medical Officers of Health, the "Future of the School Health Services," comments, the clinical work of the service must involve the co-operation of a wide variety of specialists. This is particularly important in the care of handicapped children. The report sees the doctor in the school health service as having essential clinical as well as administrative responsibilities. And though paediatricians—as well as suitably trained general practitioners—are acknowledged as having an important rôle in the service, it is considered impossible, in view of the heavy pressure on the hospital paediatric service for these specialists to undertake all the clinical work involved in the school service. Opinions will differ on what each should contibute to maintaining the health (and this includes assessment and prevention as well as treatment) of the school child. But one thing is quite clear: though co-operation will benefit from integration of the three branches of the National Health Service, the future pattern of the school health service within the National Health Service must be well planned if it is to provide the necessary continuity of medical care from infancy through to adulthood.

The expertise of school medical officers gained over the years in both clinical and administrative aspects of the school health service must not be lost; this knowledge and experience must form the cornerstone of the new service.

My thanks are due to all who have contributed to this report. The team spirit to which I referred initially extends from the Chairman and Members of the Education Committee through to the officers at all levels.

I have the honour to be
Your obedient Servant,

Philip C. Moore.

PRINCIPAL SCHOOL MEDICAL OFFICER.

County Health Department,
The Shirehall,
Abbey Foregate,
Shrewsbury.
(Telephone No. Shrewsbury 52211)
April, 1971.

EDUCATION COMMITTEE

CHAIRMAN:
LT.COL. A. P. SYKES, M.B.E., J.P., D.L. (Vice-Chairman of Council)

VICE-CHAIRMAN:
DR. B. E. MARSH

ALDERMEN:

BOYNE, Dowager The Viscountess, C.B.E., J.P., LL.D.
CORDINGLEY, C.F.
DYER, Sir Leonard, Baronet (Chairman of Council)
FELL, W. M. W., M.Sc.
HAMAR, Dr. L. A.
JONES, T. H., B.E.M.
PAIN, T. H., J.P.
RIDDELL, J. R., M.B.E.
WEDGE, T.

COUNCILLORS:

BATKIN, H. N.
BRADSHAW, H. R.
BULLOCK, H. P., J.P.
CHALLINOR, W. C.
DUFFIELD, F. L.
DUGDALE, J. R. S.
GASK, Mrs. D. I. P., J.P.
GREEN, S. P.
GRIFFIN, N. J.
HAYWARD, Mrs. J. A.
HODGSON, Mrs. N. B.
JONES, R.
JONES, W. G.
LEE, R.
PILLING, A. M.
PITMAN, R. N.
STRONG, Mrs. M. E.
WILLIAMS, A. C.
WILLIAMS, D. A. W.
WRIGLEY, Mrs. A. G.

CO-OPTED MEMBERS:

AYLING, Rev. Preb. J. C.
CRICK, J. W.
BURROUGHS, Professor, G. E. R.
HARTLEY, Mrs. M. E.
MARSH, Mrs. C.
MOORE, J. R.
PARRY, N.
UNITT, W. B.
WELCH, Very Rev. Canon T. A.
WHITEFORD, W. C.
WRIGHT, Miss I. E. M.

EDUCATION (SPECIAL SERVICES) SUB-COMMITTEE

(Responsible, inter-alia, for all questions relating to medical inspection and treatment of children and health of children generally.)

CHAIRMAN OF COUNCIL
CHAIRMAN OF EDUCATION COMMITTEE
VICE-CHAIRMAN OF EDUCATION COMMITTEE (Chairman)
CHALLINOR, W. C.
CORDINGLEY, C. F.
GREEN, S. P.
HAMAR, Dr. L. A.
HAYWARD, Mrs. J. A.
HODGSON, Mrs. N. B.
JONES, T. H.
JONES, W. G.
MARSH, Mrs. C.
MOORE, J. R.
PAIN, T. H. (Vice-Chairman)
UNITT, W. B.
WEDGE, T.
WELCH, Very Rev. Canon, T. A.
WRIGHT, Miss I. E. M.

MEDICAL, DENTAL AND ANCILLARY STAFF

Principal School Medical Officer:

PHILIP C. MOORE, B.Sc., M.B., B.Ch., D.Obst.R.C.O.G., D.P.H.

Deputy Principal School Medical Officer:

ERIC J. H. FOSTER, M.B., Ch.B., D.Obst.R.C.O.G., D.P.H.

Senior Medical Officers:

WILLIAM G. RHYS-JONES, M.A., B.M., B.Ch., D.P.H.
*ARTHUR H. WILDE, M.B., Ch.B., D.P.H.

School Medical Officers:

KATHLEEN M. BALL, M.B., B.Ch., B.A.O., D.P.H. (part-time)
AGNES D. BARKER, M.B., Ch.B. (part-time)
MICHAEL C. BATCHELDOR, M.B., B.S., L.M.S.S.A., D.P.H.
SHIRLEY BREMNER, M.B., Ch.B. (Appointed 16th November, 1970)
*ELIZABETH CAPPER, M.B., Ch.B., D.P.H.
ELIZABETH J. CARTER, M.B., B.S. (part-time)
JOHN D. CONDON, L.R.C.P.I. & L.M., L.R.C.S.I. & L.M.
SHEILA M. G. CROSLAND, M.B., B.S., D.P.H. (part-time)
ISABELLA L.H. HEWLETT, M.D., B.S., M.R.C.P., M.R.C.S. (part-time)
*JOHN C. HINCHLIFFE, M.B., Ch.B., D.P.H.
MARY P. K. HINCHLIFFE, M.B., Ch.B., D.P.H. (part-time)
IONA LLYWARCH, M.R.C.S., L.R.C.P. (part-time)
FLORA MACDONALD, M.B., Ch.B., D.P.H. (part-time)(Resigned 6th August, 1970)
*ALISTAIR C. MACKENZIE, M.D., Ch.B., D.P.H.
MURIEL NANKIVELL, M.B., Ch.B. (part-time)
*ALICE N. O'BRIEN, M.B., Ch.B., D.P.H.
ANNE E. PARK, M.B., Ch.B., D.Obst., R.C.O.G. (part-time)
ELIZABETH R. POLLAND, L.R.C.P., L.R.C.S., L.R.F.P.S. (part-time)
ANNE R. PRESTON, M.B., Ch.B. (part-time)
AUDREY ROSS, M.B., Ch.B. (part-time)
JOHN L. STEWART, M.D., M.B., Ch.B. (Resigned 14th May, 1970)
JOAN P. H. THOMPSON, M.R.C.S., L.R.C.P. (part-time)
*MARGARET H. F. TURNBULL, M.B., Ch.B., D.P.H.
ELIZABETH A. WELTON, M.B., Ch.B. (part-time)

Principal Dental Officer:

CHARLES D. CLARKE, L.D.S.

Area Dental Officers:

ROGER A. HEESTERMAN, B.D.S., D.D.P.H. (Resigned 31st August, 1970)
DENNIS H. SMALL, B.D.S., D.P.D., (Appointed 2nd November, 1970)

Senior Dental Officers:

GEOFFREY G. FIELD, B.D.S.
NOEL GLEAVE, L.D.S.
PERCY J. JARRETT, B.D.S. (Resigned 31st January, 1970)
DAVID A. PRICE, B.D.S., D.D.P.H.
JANCIS M. SCARBOROUGH, B.D.S.
GEORGE B. WESTWATER, L.D.S.

Dental Officers:

Whole-time:
ROBERT C. GROCOTT, B.D.S. (Appointed 26th January, 1970)
GILLIAN LAWLEY, B.D.S. (part-time from 3rd August, 1970)
LESLEY S. SELLAR (Née Cherry), B.D.S. (Appointed 29th June, 1970)

* Also District Medical Officer of Health

Dental Officers:

Part-time:
ALEXANDER J. LAVELLE, L.D.S., R.F.P.S. (Died 27th February, 1970)
REGINALD H. N. OSMOND, L.D.S.
JEAN W. PATTISON, L.D.S.
ROSALIND RONAYNE (Appointed 2nd March, 1970. Resigned 29th May, 1970)
BRIAN J. TONGUE, B.D.S. (Resigned 30th October, 1970).

Consultant Orthodontists (part-time):

BRIAN T. BROADBENT, F.D.S.
MICHAEL F. SCOTT, L.D.S.

Anaesthetists (part-time):

IRENE L. CLARKE, M.B., Ch.B., D.Obst.R.C.O.G.
MICHAEL ELDER, M.B., B.Ch.
JOHN P. GILES, M.R.C.S., L.R.C.P., D.A., D.Obst.R.C.O.G.
HENRY A. JOHNSON, M.B., Ch.B., M.R.C.S., L.R.C.P. (Resigned 2nd March, 1970)
JAMES J. POLLAND, L.R.C.P., L.R.C.S., L.R.F.P.S.
FREDA WHITNEY, M.B., Ch.B.

Dental Technicians:

NORMAN J. RUSHWORTH
CLIVE EVERINGHAM (Resigned 1st May, 1970)

Apprentice Dental Technician:

MARK J. DAVIES

Dental Laboratory Assistant:

CAROL DAVIES (Appointed 27th July, 1970)

Dental Auxiliaries:

JUDITH C. BISHOP (part-time)
AUDREY E. BUCKLEY
SUSAN H. HEBDON (Resigned 30th June, 1970)
GILLIAN B. WOOLDRIDGE

Dental Hygienists:

ELAINE F. WILLIAMS (Née COPPEN)(Part-time)
HENRY MACEFIELD

Consultant Children's Psychiatrist (part-time):

DAVID R. BENADY, M.B., B.S., M.R.C.S., L.R.C.P., D.C.H., D.P.M.

Educational Psychologists:

JOHN L. GREEN, B.A.
DAVID R. JONES, B.Sc.(Hons.), Teacher's Diploma
MARGARET THOMAS, B.A. (part-time)
MAURICE B. WALTERS, B.Sc., Dip.Ed.Psych.

Psychiatric Social Worker:

BRIDGET C. DOWNER, Diploma in Social Studies (London), Certificate in Psychiatric Social Work (Edinburgh)

Child Guidance Social Workers:

SONIA G. BLISS, S. R. N., S.C.M., H.V. Certificate., Certificate in Social Work (Appointed 7th September, 1970)
BETTY BOYCOTT, Social Science Diploma (London)(part-time)
ROSEMARY CORFIELD, B.A., Certificate in Social Science (Liverpool)(Resigned 26th June, 1970)
CARA RHYS-JONES, LL.B. (part-time)

Audiologist/Senior Speech Therapist:

EDWARD PAULETT, L.C.S.T., Dip.Aud.

Audiometrician/Vision Testers:

ROSAMUND K. FLOOK
ELIZABETH C. HEALEY (Appointed 2nd September, 1970)
JOAN ROBINSON

Speech Therapists:

MAUREEN B. AVISON, L.C.S.T. (part-time)(Resigned 11th September, 1970)
PAULA BOOTH, L.C.S.T.
ELIZABETH M. INGLIS, L.C.S.T.
PENELOPE J. C. MOORLEY, L.C.S.T. (Appointed 6th April, 1970)
MARJORY M. SHELDON, L.C.S.T. (part-time)

Senior Physiotherapist:

DENISE B. WOODS

Physiotherapists:

PENELOPE A. L. CORFIELD (part-time)(Resigned 22nd July, 1970)
CLARICE D. E. DUFFY (part-time)
JENNIFER A. LOVELL (part-time)(Appointed 8th September, 1970)

Physiotherapist's Helper:

ELIZABETH A. TAYLOR, S.R.N. (part-time). (Appointed 5th October, 1970).

Consultant Chest Physicians (part-time):

ARTHUR T. M. MYRES, B.A., B.M., B.Ch., M.R.C.P., M.R.C.S., L.R.C.P.
PHILIP E. PERCEVAL, M.D., M.A., B.Ch., M.R.C.S., L.R.C.P.

Health Education Officer:

HARRY HARRIS

Health Education Lecturers:

DAPHNE GILLETT
JEAN M. OWEN (part-time).

Report for the year 1970

GENERAL

The area covered by the Local Education Authority comprises 862,482 acres; and in June, 1970, the home population, as estimated by the Registrar General, was 335,520, an increase of 3,190 compared with 1969.

The number of pupils on the school register in September, 1970, was 55,722 compared with 53,973 in September, 1969.

At the end of the year, there were in the County of Salop, including the Borough of Shrewsbury, the following schools:

	Schools	*Departments*	*Pupils on Register*
Non-Residential :			
Nursery Special School	1	1	53
Nursery	3	3	120
Primary (County)	91	91	18,951
Primary (Voluntary)	139	139	14,640
Secondary Modern (County)	25	25	11,432
Secondary Modern (Voluntary)	1	1	327
Secondary Grammar (County)	10	10	4,998
Secondary Grammar (Voluntary)	3	3	1,048
Comprehensive (County)	5	5	3,791
Residential :			
Secondary	1	1	136
Special	3	3	192
Hospital	1	1	34
TOTAL	283	283	55,722

The table below shows the establishment of principal posts in the School Health Service and the staffing position at 31st December, 1970:

	Establishment	*Staff at 31st Dec., 1970*
Principal School Medical Officer	1	1
Deputy Principal School Medical Officer	1	1
Senior Medical Officers	2	2
School Medical Officers—whole-time	13	2
—part-time		20
Principal School Dental Officer	1	1
Area Dental Officer	1	1
Senior Dental Officers	6	5
Dental Officers—whole-time	6	2
—part-time		3
Dental Auxiliaries—whole-time	6	2
—part-time		1
Orthodontists—whole time	1	–
—part-time		1
Dental Hygienist—whole time	2	1
—part-time		1
Dental Technicians	3	1
Apprentice Dental Technician	1	1
Dental Laboratory Assistant (Included in Dental Technician Estab.)	–	1
Senior Dental Surgery Assistant	1	1
Dental Surgery Assistants—whole-time	15	10
—part-time		4
Receptionist	1	1
Audiologist/Senior Speech Therapist	1	1
Speech Therapists—whole time	5	3
—part-time		1
Physiotherapists—whole time	2	1
—part-time		2
Phyiotherapist's Helper—whole time	1	–
—part-time		1
Audiometrician/Vision Testers	3	3

Inclusive of the Principal School Medical Officer and his Deputy, the total medical staff undertaking all School Health Service duties, including administrative work, on 31st December, 1970, was equivalent to approximately 7.5 whole-time officers.

The nursing staff employed in the School Health Service at the end of 1970 was 4 whole-time and 14 part-time School Nurses, while part-time service was also rendered by 24 whole-time Health Visitors and 15 District Nurse-Midwives who were employed by the Local Health Authority.

MEDICAL INSPECTION AND TREATMENT

At the time of writing this report, there is an atmosphere of uncertainty regarding the prospect of early administrative unification of the Health Services. Precisely what form the School Health Service will take under this re-organisation and its relationship to a restructured Health Service and the Education Service of the future, is at present very much open to conjecture.

It is very obvious, however, that a strong element of medical administration will be retained in the School Health Service and that there must be a very close liaison with the Hospital Services and General Medical Practitioners.

Section 48 of the Education Act, 1944, requires the Local Education Authority to provide for the Medical Inspection, at appropriate intervals, of all pupils attending Maintained Schools, including County Colleges. This Section also requires parents to submit their children for such inspection when so requested by an authorised Officer of the Authority.

Under the National Health Service Act, 1946, children can receive treatment from Medical Practitioners who have contracted with the Local Executive Council to provide general medical services; and children found on examination by a School Medical Officer to be suffering from any defect are, save for certain agreed conditions, namely orthopaedic, eye, ear, nose and throat conditions, referred to their own Doctors. Such pupils are followed up by the School Nurses and any necessary Specialist advice or treatment is arranged either through the Family Doctor or directly with one or other of the Hospitals in the area of the Birmingham Regional Hospital Board as listed on page 18.

The School Medical Officer and Nurse should confer with the Family Doctor about children in whose health they are all concerned, and if each tries to understand the functions and responsibilities of the other, their work can be integrated in the child's interests. Generally, parents take much interest in the School Health Service, and the majority with children in the younger age groups attend Routine Medical Inspections. If any special problem is raised by a parent when meeting the School Doctor, a special appointment can be made for a fuller review or examination at home or at a School Clinic (see page 16 in this report).

In this County the following Inspections are carried out:—

(i) *Routine Inspections:*

Routine medical examinations are carried out of pupils in one age group only, namely Entrants—on admission to school, usually five years. There is no need to stress the importance and significance of this basic routine examination at school entrance age. This is the base line upon which all future assessments will rest. There were approximately 55,700 pupils on the School Register in 1970 and of this total 7,081 were examined for Routine Medical Inspection purposes. Vaccinations, Immunisations, Health Education talks, Audiology and Cytology continue to make increasing demands upon the Medical Officers, whose time for purely routine Medical Inspection purposes is proportionately reduced.

(ii) *Selective Medical Inspections:*

Selective Medical Inspections are carried out at all Secondary Schools in the County. The parent of each pupil due for examination in the 11 and 14 year age groups is asked to complete a questionnaire giving information relating to the child's general health, medical history, progress, etc., and only

those children selected on the basis of information provided in the completed questionnaires are given routine medical examinations. Some 4,167 pupils—1,959 out of 2,734 in the 11 year age group and 2,208 out of 2,895 in the 14 year age group—were considered and found not to warrant routine medical examinations. This scheme ensures that more attention is given to individual pupils with specific problems.

(iii) *Special Inspections and Re-Examinations:*

In addition to the inspection of pupils mentioned in Sections (i) and (ii) above, special examinations are made of pupils referred on account of defects by Head Teachers or School Nurses, including children who are in need of special educational treatment. Annual re-examinations are also made of children found to have a defect requiring observation. The numbers of pupils examined as Specials and Re-Examinations in 1970 were 1,523, and 9,149 respectively, making a total of 10,672.

The number of defects discovered followed the usual trend over the past few years with visual defects very much prominent. In general the Medical Inspection results were satisfactory and the nutrition figure which attained 100% in 1961 has since remained at that level.

In a service having as one of its chief aims the promotion of preventive medicine, the modern trend is to depart from the rigid system of periodic medical examination at defined ages and to establish a very close relationship between the Head of the School and the School Medical Officer so that the latter may give advice and guidance in regard to pupils with special problems irrespective of whether or not they fall into a particular age category. Medical Officers are, therefore, allocated a special sessions each month to visit Schools in their areas, for this specific purpose. Difficulties encountered by children in School and elsewhere are often solved as a result of informal discussions between School Medical Officers and Teachers. This process is the basis of all good School Health work. The practical value of this Advisory and Counselling Service provided by the School Medical Officer cannot be over-emphasised.

Appreciation is acknowledged of the help and co-operation of Head Teachers who often at some inconvenience to themselves make the School Medical Inspections successful.

Treatment of Eye Conditions:

Pre-School Vision Testing.—In January, 1970, a scheme was introduced in the County for the combined testing of vision and hearing of all children at the age of 9 months. The children concerned are invited by appointment to attend suitably situated Clinics at specified times, the mothers being offered a second appointment if they are unable to keep the first. The screening tests are carried out by specially trained Health Visitors and consist of (a) the commonly accepted "free field" or "distraction" technique for hearing and (b) the "Rolling Balls" test for visual acuity developed by Dr. Mary Sheridan.

An account of the hearing tests and results is dealt with on page 36 of this report under Audiology.

In regard to vision testing this consists of the use of white polystyrene balls ranging in diameter from 2½" to ½" which are rolled across a piece of black material placed on the floor at a distance of 10' from the child who sits on mother's lap so that an opinion may be formed of the child's ability to follow the balls as they roll across his field of vision. Dr. Sheridan uses balls down to $\frac{1}{8}$" or even $\frac{1}{16}$" in diameter, but it is considered that for a rapid screening test the ability to follow a ½" ball at 10' is a sufficient indication of satisfactory binocular visual acuity (that is 6/9) at 9 months. Undue prolongation of the test is liable to result in the child becoming bored and unco-operative.

During the testing session each child is observed for the presence of squint. Children who fail vision or hearing test at the first visit, or about whom there is any doubt, are re-tested at a later date and those who fail a second time are referred to local County Council Clinics or Hospital Consultants as appropriate. Obvious squints are referred for a Consultant opinion as soon as possible.

In the course of the year a total of 5,955 appointments were offered of which 3,538 were kept (an attendance rate of 60%). As a result of the "Rolling Balls" test only 4 children were referred for a Consultant opinion and it was established that these would in any case almost certainly have been noticed without the screening test. The results therefore indicate that the number of defects of visual acuity revealed by the test is negligible, and they also confirm that the vast majority of 9 month old children can see and follow a ½" ball at 10' which is equivalent to a binocular visual acuity of 6/9. It was therefore considered that the time spent in administering the "Rolling Balls" test as a routine screening procedure for 9 month old children is not justified and it was discontinued at the end of the year.

Where squint is concerned, however, 40 children were found to be under treatment (28 through Hospitals and 12 through Family Doctors). In addition, 67 children were referred for treatment for this condition (56 to the Hospital and 11 to Family Doctors). A further 38 children were at the end of the year awaiting appointments to be seen by Medical Officers at Child Health Clinics for further examination with a view to possible referral to the Eye, Ear and Throat Hospital for treatment.

The early referral of obvious or suspected cases of squint is of paramount importance and it would seem that during the course of the hearing test the Health Visitor occupied in "distracting" the child with a toy or similar object is ideally situated to observe any squint which may be present.

School Child Vision Testing.—Vision is tested at 5, 7, 11 and 14 years, but all pupils suffering from defective vision are seen by the School Medical Officer at annual re-examinations as mentioned in Section (iii) above. Special attention is paid to children suspected to be suffering from squint and Ophthalmic Consultants stress that referral at an early age is essential to guarantee satisfactory results after treatment. Colour vision is tested at the age of 11 years.

Vision testing (near, distance, colour vision and muscle balance) by means of the "Keystone" self-contained portable vision screener adopted for use in the County in connection with School Medical Inspection was continued during the year. The vision screener is a great advantage particularly in many of the older Primary Schools where lack of adequate accommodation makes it difficult to carry out vision testing by traditional methods.

Combined vision and hearing tests are carried out immediately prior to Routine Medical Inspections and recent testing results in both categories are therefore available to the examining Medical Officer. At the beginning of the year there were two Audiometrician/Vision Testers available and at that time as a compromise, Primary Schools only were included in the combined scheme. However, with the appointment in September, 1970, of a third Audiometrician/Vision Tester it was possible to extend vision testing to some Secondary Schools where School Nurses have hitherto been undertaking vision testing. Eventually the School Nurses will be relieved of all such pre-school Medical Inspection testing. The scheme continues to operate satisfactorily and there is now a greater uniformity in the vision testing results. During the year, the 3 Audiometrician/Vision Testers visited 156 schools and in the course of 824 half-day sessions work, completed approximately 12,000 vision tests. Children considered to require ophthalmic treatment are referred by the School Medical Officer either to an Ophthalmic Optician or, where necessary, to an Ophthalmic Consultant. School Nurses carry out regular follow-up visits to schools and homes to ensure that treatment is in fact obtained for such school children and that spectacles are being worn in cases where they have been prescribed. In 1970, 8,604 pupils were examined by School Medical Officers and the following were noted to be suffering from various ophthalmic defects and referred for treatment where necessary:—

	Treatment	Observation
Vision	165	1,364
Squint	41	216
Other	3	47

In addition, 30 pupils were noted as having had squint operations and 70 to be receiving orthoptic exercises.

During the year 6,600 children were dealt with for defective vision or other eye conditions, 6,053 being referred to Ophthalmic Medical Practitioners or Ophthalmic Opticians, and 547 being treated by Ophthalmic Consultants at the Shrewsbury Eye, Ear and Throat Hospital and Bridgnorth and South Shropshire Infirmary.

Defects of Ear, Nose and Throat.– With the exception of visual defects and skin conditions, Medical Officers referred for treatment more children suffering from ear, nose and throat defects than for any other single cause. Of the 8,604 pupils medically examined, 41 were referred to the Ear, Nose and Throat Specialists during 1970 and another 625 were noted for observation on account of tonsil and adenoid conditions.

Operations for the removal of tonsils and adenoids were performed on 546 Shropshire school children in Hospitals of Nos. 15 and 16 Hospital Management Committee Groups.

Orthopaedic Defects.–There are seven Orthopaedic and After-Care Clinics in Shropshire attended by an Orthopaedic Specialist and an Orthopaedic Nurse.

During 1970 of 8,604 pupils medically examined by the School Medical Officers, the following were noted as suffering from varying degrees of orthopaedic defects and referred to the Orthopaedic Surgeon where treatment was considered necessary:–

	Treatment	Observation
Posture	1	106
Feet	17	282
Other Conditions	10	158

Defects of posture or feet account for an appreciable number of orthopaedic defects. Postural defects usually respond to corrective exercises at school and advice is given by School Medical Officers on choice of suitable footwear.

Care of Feet.–During 1970 the County Chiropodist carried out 6 routine Foot Inspections (4 in Secondary and 2 in Primary Schools) involving 1,792 pupils; 90 cases of verruca (26 already having treatment and 64 of which had not been diagnosed) were discovered. In addition, the Chiropodists found 22 cases of suspected Athlete's Foot (3 under treatment and 19 undiagnosed) together with 6 other foot conditions.

Head Teachers are asked to report any cases of suspected verucca occurring amongst pupils in their schools in order that they may be seen and treated by the Chiropodists.

Children found on inspection to have a verruca are excluded from swimming, showers and participation in barefoot physical education until the condition has been treated and cured.

Particular attention is paid in schools to the most likely spots for the spread of infection, e.g. gymnasium floors, swimming baths, etc., and these are disinfected.

Diseases of the Skin.–Of the 8,604 pupils medically examined by the School Medical Officers, 69 required treatment for skin conditions and 271 were noted for observation. The numbers of Shropshire school children known to have been treated during 1970 for diseases of the skin (other than of the feet) are indicated below:–

Ringworm—Scalp	2
Ringworm—Body	2
Scabies	31
Impetigo	20
Other Skin Diseases	9
Total	64

Treatment of Minor Ailments.— Most of the conditions which could be seen at Minor Ailment Clinics are dealt with by the Family Doctor. Some Minor Ailment Clinic facilities are in fact still offered at Child Health Clinics.

At the "School Nurse" session and the "School Doctor" sessions at Bridgnorth, Oswestry and Wellington Child Health Centres, 22 children made 25 attendances in 1970. Examinations by the School Doctor totalled 13 and 6 of the children were referred to their own Doctor.

Convalescence.—This year it was not necessary for the usual free convalescent holiday to be recommended by School Medical Officers. On the other hand where children were regarded as delicate pupils the appropriate recommendation was made by the School Medical Officer for them to be placed in an Open Air School.

Cleanliness Inspections.—School Nurses carry out routine inspections for verminous infestation of pupils in all Primary Schools, follow-up inspections being made of pupils found to have nits or lice. Such inspections in Secondary Modern and Grammar Schools are now arranged only at the request of the Head.

During 1970 a total of 83,310 head inspections was carried out by the School Nurses, and of the 38,357 pupils on the registers of schools inspected, 659 were found to be verminous, some on more than one occasion. This represented a figure of 1.7 per cent of the school population who were found to be verminous during the year.

It was found necessary during the year to issue 16 Formal Cleansing Notices, but no Cleansing Orders were issued. No legal proceedings were instituted during the year.

Infestation is mainly confined to children whose home conditions are unsatisfactory.

Work of School Nurses.—School Nursing is undertaken by 18 School Nurses (4 whole-time and 14 part-time), 24 Health Visitors and 15 District Nurses (who are estimated to devote about 7 per cent of their time to this work). In addition to visits to schools for head inspections, the School Nurses attend Routine Medical Inspections. Children ascertained by the School Medical Officers to be suffering from defects of any kind are either referred to the Family Doctor for treatment or noted for observation, and the subsequent follow-up work of the School Nurses, together with the number of days given to Routine Medical Inspections is indicated in the following table:-

Staff	Staff		Medical Inspection days	Treatment Cases				Observation Cases			Totals	
	Number	Whole-time equivalent		Visited	Not Visited	Total	Treated	Visited	Not Visited	Total	Cases	Visits
School Nurses ..	4	4	73	1,349	485	1,834	1,834	125	60	185	2,019	2,191
Part-time School Nurses ..	14	6.96	212	2,352	453	2,805	2,805	1,643	319	1,962	4,767	1,898
Health Visitors ..	24	3.84	202	1,265	373	1,638	1,638	994	198	1,192	2,830	1,299
District Nurses ..	15	1.91	20	104	9	113	113	55	9	64	177	190
TOTAL ..	57	16.71	507	5,070	1,320	6,390	6,390	2,817	586	3,403	9,793	5,578

Education of Children in Hospitals.—The Robert Jones and Agnes Hunt Orthopaedic Hospital have a permanent arrangement with the Education Committee for the provision of special educational facilities. At Copthorne Hospital, Shrewsbury, patients recommended for special tuition attend a class held regularly at the hospital by a tutor provided by the Education Committee.

In other hospitals in the County, when a child is admitted whose stay is likely to be prolonged, special arrangements are made for individual tuition if the medical condition permits.

Employment of Children.—In accordance with the provisions of Section 59 of the Education Act, 1944, all pupils reported by the Chief Education Officer as being engaged in work outside school hours are examined by a School Medical Officer to ensure that they are not being employed in a manner likely to be prejudical to health or to render them unfit to obtain the full benefit of education.

After this initial examination, each child is seen annually at routine medical inspection, or at an earlier date if the School Medical Officer recommends such an arrangement.

Only children of 13 years or more are allowed to take up employment, which is restricted by statute and may not exceed two hours on school days. Work before 7 a.m. is prohibited. Employment in a number of occupations connected with hotels, public entertainments, licensed premises, racing tracks, etc., is prohibited and no child may be employed to lift, carry or move anything so heavy as to be likely to cause him injury.

Of 647 pupils examined during 1970, it was necessary to recommend re-examination in three cases at intervals ranging from 3 to 6 months.

Medical Inspection of Pupils resident in Boarding Schools and Special Boarding Schools.—Special arrangements are made for the medical examination of children in boarding schools or resident in special boarding schools within the County, as under

Bridgnorth	Apley Park
Ellesmere	Petton Hall
Shifnal	Haughton Hall
Wem	Trench Hall

Anything relevant to the well-being of the children ascertained at the medical examination is passed on to the Head of the school. Every pupil in these residential establishments is on the list of a local Medical Practitioner providing General Medical Services under the National Health Service Act.

Petton Hall Residential Special School for Educationally Subnormal Boys:

Dr. M. C. Batcheldor, Medical Officer for the School, writes as follows:—

"I continued as School Medical Officer for Petton Hall during the year 1970.

This was my first full year at the school. In addition to my three formal medical examination sessions each year, during which I examine every pupil, I conduct hearing tests on all boys known to have, or suspected of having, hearing defects. I also visit the school informally on numerous occasions. I have, therefore, got to know the staff and pupils very well and I am always made very welcome by them all. The Headmaster, Mr. F. Schofield, the Matron and all the staff, co-operate willingly in my medical activities, and the general practitioners, Dr. King and Dr. Pickup, continue to be most helpful in the day-to-day care of the pupils.

There are still 92 boys at the school and, as my time as Medical Officer goes on, more and more of these are becoming known to me prior to their admission to the school. I am, therefore, in a better position to discuss their problems with the staff. There is a considerable waiting list for admission, and the selection of the cases most in need presents quite a problem.

I now attend the school leavers' conference, with the aim of helping in any way in the settlement and employment of all school leavers. This, in itself, presents considerable problems, and is a most important part of the work of Petton. The whole of the boy's education is directed towards his settlement in the community.

I still find my duties as School Medical Officer of Petton Hall most enjoyable and rewarding."

Trench Hall Residential Special School for Maladjusted Children:

Dr. A. D. Barker, Medical Officer for this School, writes as follows:—

"I visit Trench Hall School at the beginning of each school year in order to medically examine all the children attending.

I subsequently visit once a month to see any new pupils or children brought forward by the Head Teacher or myself for follow-up purposes.

This is always a very rewarding medical from my point of view. The problems are so many and varied.

On the whole these children are physically fit but they do frequently complain of physical symptoms which are mainly the result of their emotional ill health. This demands vigilance on the part of the Staff and this year they did become concerned about a boy who complained of many and varied symptoms but Miss Martin and her staff felt some were genuine and that the boy was ill. The boy did become seriously ill and required brain surgery.

For the first time in the school's history, so far as I know, the school had to be closed. This was because of the number of staff suffering from influenza.

All the Staff were offered influenza immunisation this year and so far all is well.

I am always made to feel welcome when I visit Trench Hall. I hope to continue visiting the school in the coming year."

Haughton Hall Residential School for Educationally Subnormal Girls

Dr. A. N. O'Brien, Medical Officer for the school writes as follows:—

"Educationally subnormal girls in need of special education in a residential school are admitted to Haughton Hall after a full assessment has been carried out.

At present there are sixty-six pupils whose ages range from 8 years to 16 years. Some of these are border-line educationally subnormal pupils at either the lower or upper range of ability.

The age range and the wide variation in ability, as shown by Intelligence Quotients, is demonstrated in graphs I and II.

The Assessment Unit, into which the younger children are first admitted, provides a suitable environment in which the children learn to adjust to their new situation and in which teachers and house-mothers gain insight into the emotional as well as the educational problems of the girls. After a variable period in the Unit, the girls then move on into the larger classes in the school.

Medical examinations with early diagnosis and assessment and the follow-up of treatment have become an integral part of the work of the school. Some children are found on admission to have defects requiring long-term treatment and which had remained untreated until they came to Haughton Hall. Others are so emotionally disturbed that it is not possible to undertake medical or surgical treatment until they settle down and gain sufficient confidence to allow investigations to be done.

At the beginning of each September, all the pupils have a full medical examination; they are re-examined at the start of the Spring and Summer terms if any defect has been found. All new entrants are examined on admission and similarly followed up during the course of the school year.

Each term, special sessions are held in the school by the County Audiologist to test the hearing of each pupil thought to be suffering from a hearing loss. Hearing aids are issued to those who need them and close supervision is kept while they remain at school. During the past year, six pupils have been referred to Cosford R.A.F. Hospital for treatment of an ear, nose or throat condition. Operations have included removal of tonsils and adenoids, surgical treatment of middle-ear disease and plastic repair of damaged ear-drums.

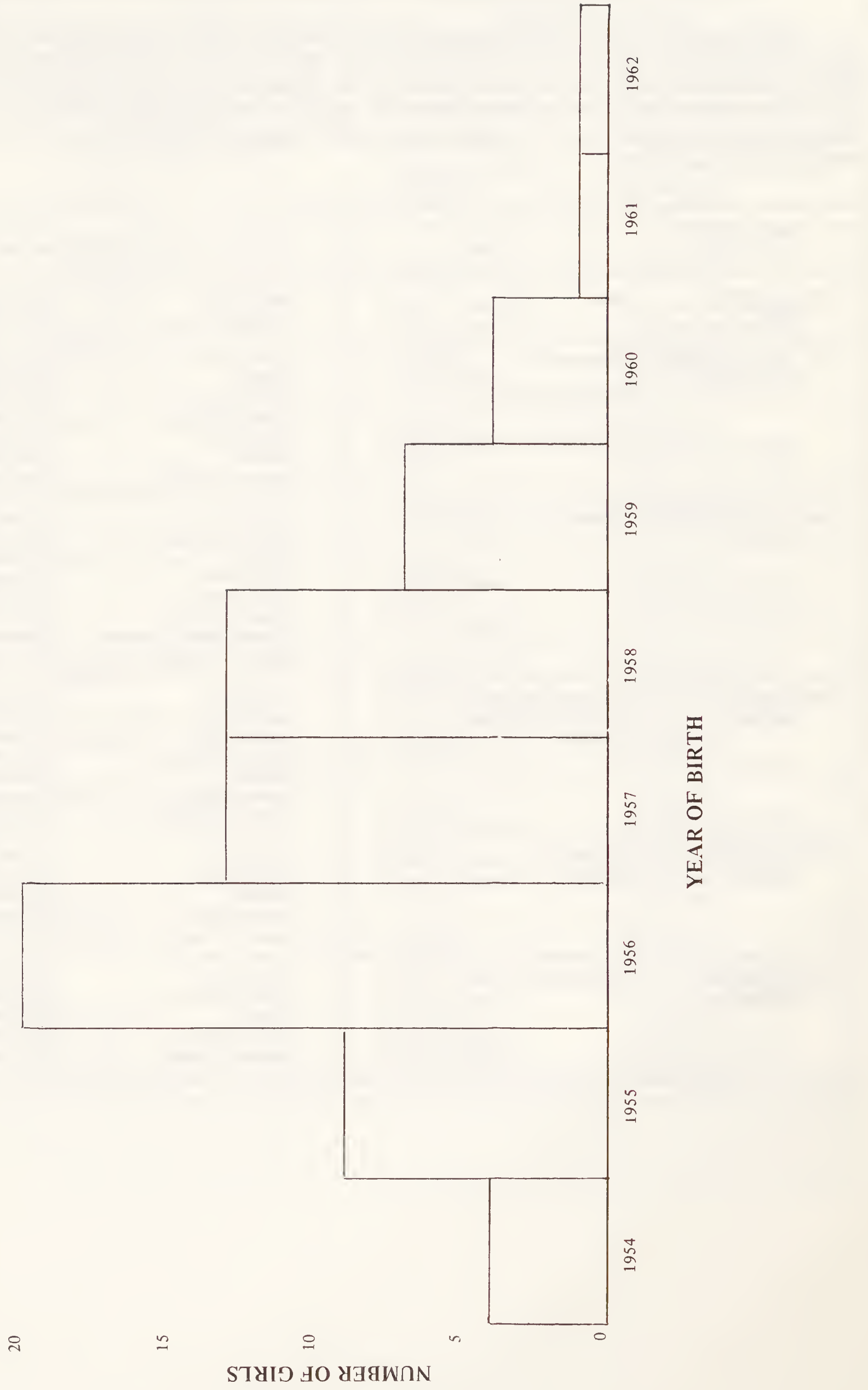
Throughout the school year, visits are paid to carry out vaccination and immunisation procedures, including BCG and more recently vaccination against Rubella i.e. German measles.

Special attention is given to girls leaving school who may need further training or supervision. The individual's medical history is taken into consideration when the question of suitable employment arises.

The closest co-operation exists between the school and the County Health Department and with Hospital Consultants, whose valuable advice is so readily available. Full use is made of the special Clinics in the County and in particular the facilities provided by Cosford Hospital have been of value in getting early treatment carried out during the term time. Medical conditions found at school medical examinations during the past year are shown in the following table."

Defect	Number of Pupils
Hydrocephalus	1
Speech Defect	2
Hearing Loss	11
Vision Defect	19
Asthma	1
Epilepsy	2
Diabetes	1
Cerebral Palsy	2
Other Orthopaedic	3
Maladjusted	3
Obesity	4
Mongolism	1


NUMBER OF GIRLS
1
2
3
4
5
6
7
8
46
50
55 56 57 58
61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77
79 80
84
I.Q. RANGE
INTELLIGENCE QUOTIENT RANGE


NUMBER OF GIRLS
0
5
10
15
20
YEAR OF BIRTH
1954
1955
1956
1957
1958
1959
1960
1961
1962
AGE RANGE

SCHOOL CLINICS PROVIDED BY THE LOCAL EDUCATION AUTHORITY

The following is a list of clinic sessions made available by the Local Education Authority at which school children may attend. School doctors' sessions operate concurrently with general Child Health Clinics. In addition to the clinics listed, there are two Mobile Dental Units and one Mobile Medical Unit. The times at which clinics are held are liable to be modified, but up-to-date information on clinic sessions may be obtained from the Health Department, Shirehall, Shrewsbury, or from the local School Medical Officer concerned.

Medical Officer and District	Centre	Frequency of Sessions	
DR. BARKER Wem	Wem	Audiology Dental	As required Four sessions weekly
DR. BATCHELDOR Whitchurch	Ellesmere Petton Hall Whitchurch	Audiology Dental Audiology Speech Therapy Audiology Dental Speech Therapy	As required Six sessions weekly As required One session weekly As required Four sessions weekly One session weekly
DR. BATCHELDOR Oswestry	Oswestry	Audiology Child Guidance Dental Ophthalmic Orthopaedic School Doctor School Nurse's Session Speech Therapy	As required One session monthly Ten sessions weekly Two sessions monthly One session weekly One session weekly One session weekly Two sessions weekly
DR. CAPPER Ludlow	Church Stretton Cleobury Mortimer Ludlow	Audiology Audiology Audiology Child Guidance Dental Ophthalmic Speech Therapy	As required As required As required Five sessions monthly Four sessions weekly Three sessions monthly One session weekly
DR. CONDON Madeley	Broseley Madeley	Audiology Audiology Dental Orthopaedic Speech Therapy	As required As required Six sessions weekly Two sessions monthly One session weekly
DR. CONDON Wellington	Wellington	Audiology Child Guidance Dental School Doctor Speech Therapy	As required Five sessions weekly Eighteen sessions weekly One session weekly Two sessions weekly

Medical Officer and District	Centre	Frequency of Sessions	
DR. MACKENZIE Shrewsbury	Health Centre, Murivance	Speech Therapy	Five sessions weekly
	5a Belmont	Dental	Thirty-six sessions weekly
	Condover Hall, nr. Shrewsbury	Speech Therapy	One session weekly
	Katharine Elliot School (Woodcote Way)	Speech Therapy	Three sessions weekly
	The Old Vicarage, Shirehall	Child Guidance	Twelve sessions weekly
	The Adult Training Centre, Shrewsbury	Hearing Assessment	Three sessions monthly
		Audiology	As required
	Albert Road	Audiology	As required
DR. NANKIVELL Shifnal	Albrighton Group Practices Surgery	Audiology	As required
	Albrighton County Junior School	Speech Therapy	Two sessions weekly
	R.A.F. Cosford Hospital	Hearing Assessment	One session monthly
	Shifnal	Audiology	As required
	Haughton Hall	Audiology	As required
		Speech Therapy	One session weekly
DR. O'BRIEN Newport	Newport	Audiology	As required
		Child Guidance	One session monthly
		Dental	Three sessions weekly
DR. PENNEY Bishop's Castle	Bishop's Castle	Audiology	As required
		Child Guidance	One session monthly
DR. BREMNER Market Drayton	Market Drayton	Audiology	As required
		Child Guidance	One session monthly
		Dental	Twenty sessions weekly
		Speech Therapy	One session weekly
DR. NANKIVELL Oakengates	Donnington Infants' School	Speech Therapy	One session weekly
	Hadley	Audiology	As required
		School Doctor	One session monthly
	Teagues Bridge Infant School	Speech Therapy	One session weekly
	Oakengates	Audiology	As required
		Speech Therapy	One session weekly
DR. TURNBULL Bridgnorth	Bridgnorth (Northgate)	Audiology	As required
		Child Guidance	Five sessions monthly
		Dental	Twenty sessions weekly
		School Doctor	One session monthly
		Speech Therapy	Two sessions weekly
	Highley	Audiology	As required
DR. WILDE Dawley	Dawley	Audiology	As required
		Dental	Six sessions weekly
		Speech Therapy	One session weekly
		Child Guidance	Two sessions weekly
	Sutton Hill	Audiology	As required
		Speech Therapy	One session weekly
	Woodside	Child Guidance	One session fortnightly

HOSPITAL AND SPECIALIST SERVICES

Children found to be suffering from defects requiring either the advice of a Consultant or in-patient treatment are referred, preferably in collaboration with their family doctor, to the following hospitals all of which with the exception of R.A.F. Hospital, Cosford come under the Birmingham Regional Hospital Board. Children suffering from chest conditions are seen by a Chest Physician at one of the Chest Clinics.

General Medical and Surgical Conditions:
The Royal Salop Infirmary, Shrewsbury
Copthorne Hospital, Shrewsbury
The North Staffordshire Royal Infirmary, Stoke-on-Trent
The Kidderminster and District General Hospital, Kidderminster
The Wolverhampton Royal Hospital, Wolverhampton
The Staffordshire General Infirmary, Stafford

Eye Conditions:
The Eye, Ear and Throat Hospital, Shrewsbury
The North Staffordshire Royal Infirmary, Stoke-on-Trent
The Staffordshire General Infirmary, Stafford
The Kidderminster and District General Hospital, Kidderminster
The Wolverhampton and Midlands Counties Eye Infirmary, Wolverhampton

Ear, Nose and Throat Conditions:
The Bridgnorth and South Shropshire Infirmary, Bridgnorth
Copthorne Hospital, Shrewsbury
The Eye, Ear and Throat Hospital, Shrewsbury
Ludlow and District Hospital, Ludlow
Oswestry and District Hospital, Oswestry
Shifnal Cottage Hospital, Shifnal
Whitchurch Cottage Hospital, Whitchurch
New Cross Hospital, Wolverhampton
The North Staffordshire Royal Infirmary, Stoke-on-Trent
R.A.F. Hospital, Cosford
The Staffordshire General Infirmary, Stafford
The Kidderminster and District General Hospital, Kidderminster
The Wolverhampton Royal Hospital, Wolverhampton

Orthopaedic Conditions, including Fractures:
The Royal Salop Infirmary, Shrewsbury
The Robert Jones and Agnes Hunt Orthopaedic Hospital, Oswestry
The Kidderminster and District General Hospital, Kidderminster

Special Forms of Treatment not elsewhere available:
The Birmingham Children's Hospital, Birmingham

HANDICAPPED CHILDREN

Detection and Ascertainment–Developmental Paediatric Examinations.–It is necessary to discover handicaps or potential handicaps early in the child's life–before the baby is a year old if possible–so that appropriate treatment will be more effective. Most local authorities maintain an "At Risk" register which includes details of all children in whom the family history or circumstances during pregnancy at the time of birth or shortly afterwards suggest that the child is particularly at risk of developing a handicap, e.g. maternal infection during pregnancy, premature infants, twins, etc.

This "at risk" system has weaknesses in that it is impossible to ensure that 100% of "At Risk" children are notified, whilst some children not in the "At Risk" category nevertheless develop handicaps. It was for these reasons that in this County it was decided in May, 1969 to commence a pilot study at Ludlow, Madeley, Shifnal, Wellington and Wem Child Health Centres, to ascertain whether with available accommodation, medical and administrative staff, it would be possible to screen every new born child for the whole range of physical and mental handicaps.

Pilot Scheme

Normally, children are brought to Child Health Centres by their mothers for routine examination when the child is a few weeks old, but attendance depends upon the mother's own interest, knowledge and enthusiasm, the efficiency of the local Health Visitors in persuading parents that routine examinations are important or the mother's need for advice about her children's problems. Under the pilot scheme a clinic appointment system was, therefore, introduced.

Each mother is informed by letter that examinations by the Clinic Medical Officer will be made at the age of 4–6 weeks, 10 months and 18 months. The letter emphasises the need to ensure that the child develops normally but it is pointed out that if there is an abnormality it will be diagnosed and treated quickly.

The Health Visitor calls at the home and carries out an initial assessment of the child's progress using a chart devised by Birmingham Children's Hospital. This information assists the clinic doctor in his 20 minute examination, and if he discovers any actual or potential abnormalities he refers the child to the family doctor who, if necessary, consults a Paediatrician. Some 6,000 births occur per annum in the County, but the pilot scheme involved only 600 of these. On discovery of an abnormality or a potential abnormality, the children and parents are helped medically, socially and educationally and the preferred way to accomplish this is by teaching the parents how to help the child in the pre-school period so that need for attendance at Special Schools is avoided. A considerable number of children handicapped in various ways are ultimately integrated into the ordinary school system.

Results

The number of children participating in the pilot scheme during the period 1st May, 1969 to 31st December, 1970 and the outcome of the examinations performed are shown in the table below. The attendance rate of 80 per cent obtained for the initial examination at 4–6 weeks compares favourably with the ordinary child health clinic attendance of 70 per cent when as a rule only one third of the children attending actually see the doctor.

CONDITIONS FOUND

Examination Stage	Appointments	Examined	Under Treatment: By Family Doctor	Under Treatment: By Paediatrician	Referred to G.P.
4–6 weeks	705	569 (80%)	Otorrhoea 1 Total– 1	Clicking Hips 3 Retarded 2 Mongol 1 Deformity Hip 1 Hypertrophied tongue 1 Meningocele 2 Cardiac Condition 1 Physically/Mentally Handicapped 1 Club Foot 1 Cerebral Palsy 1 Cerebral haemorrhage 1 Total– 15	Blocked Tearduct 1 Hydrocele 2 Anaemia 1 Hip adduction 1 Clicking Hips 6 Swelling (Scrotum) 1 Sticky Eyes 1 Umbilical Hernia 4 Floppy Ventral Suspension 3 Clicking Shoulder 1 Clicking elbow 1 Total– 22
10 months	373	240 (64%)	Squint 1 Bronchitis 1 Eczema 1 Backward 2 Strabismus 1 Total– 6	Hypertrophied tongue 1 Severely physically handicapped 1 Physically and mentally retarded 1 Meningocele 1 Total– 4	Squint 8 Clicking Hips 1 Backward 2 Hydrocele 1 Sticky eyes 1 Cardiac Conditions 2 Blocked Tearduct 1 Immobile flexed toes 1 Lax ligaments 1 Umbilical Hernia 1 Observe dental malocclusion 1 Total– 20
18 months	108	58 (53%)	Albuminaria 1 Infantile Eczema 1 Strabismus 2 Total– 4	Total NIL	Total– NIL

All children discovered under this scheme to be suffering from defects of any kind are followed up by the Health Visitors to ensure that the necessary medical advice and treatment is obtained.

Operating concurrently is a scheme referred to on pages 7 and 36, whereby all children in the County are being screened at the age of 9 months for hearing and vision defects.

Findings

It was the general consensus of opinion by medical officers and health visitors concerned that the paediatric developmental scheme is very worthwhile, but that examinations at two instead of three age stages were sufficient, at 4–6 weeks and at 2 years respectively.

Under the pilot scheme involving 5 clinics and about 600 children it has been possible to absorb all the examinations in the normal child health centre clinics. The study has been a success and well within the capacity of the County Health Services so much so that it has been decided to offer developmental screening at 41 of the County's Child Health Centres to all the 6,000 children born in the County each year, commencing in mid 1971.

Assessment of Handicapped Children.—A handicapped pupil may be defined as one suffering from a disability of mind or body which is likely to interfere with normal growth, development and ability to learn. Children suffering from such disabilities or defects which impede normal progress in school are given special consideration. This varies from education in hospital (for long stay patients) and home tuition, to education in special classes or units in ordinary day schools. Residential School may be recommended where specialised treatment is necessary and which cannot be provided locally or where home circumstances justify boarding education.

The Education Act, 1944, imposed upon Local Authorities the duty of finding children who require special educational treatment and of providing this, if necessary, from the age of two years.

For the purpose of the Education Act, there are ten categories of handicap:

Blind	Educationally Subnormal
Partially Sighted	Epileptic
Deaf	Maladjusted
Partially Hearing	Physically Handicapped
Delicate	Speech Defective

A "Register of Handicapped Pupils" is maintained in the School Health Service Section. Children suffering from obvious handicaps such as total deafness, severe physical disabilities, etc., are discovered long before they reach school age and Health Visitors keep them continually under observation. The need for early discovery must be stressed and parents, family doctors, school medical officers, health visitors and teachers should refer any child thought to be suffering from a handicap so that assessment and any special educational treatment or training may be decided upon without harmful delay. Consultant Paediatricians advise the School Health Service about any handicapped children who are under their care.

During 1970, pupils ascertained by School Medical Officers under the Handicapped Pupils and School Health Service Regulations numbered 284, and a summary of the findings and recommendations to the Local Education Authority is given below. In addition 802 children found to be speech defective were brought under treatment by the Speech Therapists whilst a further 2,463 examinations were carried out at the Medical Audiology Clinics as a result of which 645 recommendations and referrals were made.

Some 788 children were under treatment at Child Guidance Clinics during the year and fuller details are contained in the report of Dr. D. R. Benady, Consultant Child Psychiatrist, on page 45.

HANDICAPPED PUPILS

Category	Pupils Specially Examined	Not Handicapped	Special Educational Treatment Recommended				Reported to Local Health Authority		Pupils not requiring supervision on leaving school
			In Ordinary School	In Special Day Class	In Special School	Home Tuition	Unsuitable for education at school	Friendly supervision on leaving school	
Blind	2	—	—	—	2	—	—	—	—
Partially Sighted	2	—	—	—	2	—	—	—	—
*Deaf	1	—	—	1	–	—	—	—	—
Partially Hearing	10	—	—	10	–	—	—	—	—
Delicate	11	—	—	—	6	5	—	—	—
Educationally Subnormal ..	225	50	2	52	45	1	37	37	1
Epileptic	1	—	—	—	1	–	—	—	—
Physically Handicapped ..	32	—	—	—	17	15	—	—	—
TOTAL ..	284	50	2	63	73	21	37	37	1

*All children suspected of being deaf or partially hearing are now dealt with not by the individual School Medical Officer but by a Specialist Audiology Team, whose recommendations are referred to on page 39.

As well, the Medical Officers, also carried out a further 423 examinations of handicapped pupils in connection with unsatisfactory school attendance, the provision of transport to and from school and the review of home tuition cases.

The following table gives details of the numbers of pupils ascertained by the School Medical Officers during the period 1961 to 1970:

	(1) Blind (2) Partially-sighted (3) Deaf			(4) Partially hearing (5) Delicate (6) Educationally subnormal			(7) Epileptic (8) Physically handicapped		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	TOTAL
Examined : 1961	—	2	2	2	31	283	5	18	343
1962	2	2	—	3	21	247	1	22	298
1963	—	3	1	2	15	252	6	21	300
1964	3	3	—	—	26	292	9	18	351
1965	2	2	—	3	16	268	—	36	327
1966	—	3	2	5	21	236	6	39	312
1967	3	6	—	1	17	279	2	28	336
1968	3	—	—	4	15	294	1	31	348
1969	4	4	1	3	9	277	—	40	338
1970	2	2	1	10	11	225	1	32	284
Recommended for Special School :									
1961	—	2	2	2	21	71	5	9	112
1962	2	2	—	3	16	52	1	10	86
1963	—	3	1	2	11	43	5	8	73
1964	3	3	—	—	17	51	6	3	83
1965	2	2	—	3	11	68	—	23	109
1966	—	3	2	5	10	45	3	24	92
1967	3	6	—	1	13	60	2	19	104
1968	3	—	—	4	10	60	1	15	93
1969	4	4	1	3	7	64	—	26	109
1970	2	2	–	–	6	45	1	17	73

Blind.—Two children were ascertained during the year as requiring special educational treatment in a school for the blind and there are now six children attending special residential schools for blind children.

Partially Sighted.—Two children were ascertained during the year as requiring special educational treatment and there are now six partially sighted pupils attending special schools in various parts of the county.

Deaf/Partially Hearing.—All children suspected of being deaf or partially hearing are dealt with not by the individual School Medical Officer, but by a Specialist Audiology Team. A special report on these handicaps and the recommendations made in this connection will be found on page 35.

Physically Handicapped.—The majority of these children who suffer from physical handicaps of varying degrees of severity, attend ordinary schools and any necessary special arrangements are made. Special transport to and from school is provided by the Education Authority for any child who on account of physical handicap, injury, acute or chronic ill health, etc. is considered unfit to attend school by other means. At the end of the year, 157 pupils were receiving special transport on medical grounds.

Where the disability is so great as to preclude attendance at either ordinary or special schools or where the pupils are undergoing temporary periods of medical treatment at home, the Education Authority provide home tuition. Each child is examined by the School Medical Officer to ensure that home tuition is necessary on medical grounds and is kept under review to ascertain when resumption of attendance at the ordinary school is desirable. Hours of tuition provided weekly vary according to the needs of individual pupils and at the end of 1970, 11 pupils were being provided with home tuition.

During 1970, some 32 new cases were assessed as physically handicapped and of this total 17 were recommended for admission to special school and 15 for home tuition. At the end of the year, 23 physically handicapped pupils were being educated in special residential schools.

Delicate.—The majority of children in this category, which includes diabetic children as well as children suffering from asthma and other chest conditions, are placed in residential schools as a change of environment for a prolonged period—often six months is recommended—on medical and sometimes on social grounds.

11 new cases were assessed as delicate pupils in 1970 and at the end of the year 10 children were in attendance at special schools.

Epileptic.—The great majority of children suffering from epilepsy are able with adequate treatment to continue to attend ordinary school with minor restrictions on their activities. Occasionally the disability is sufficiently severe to warrant admission to a special residential school for epileptics and 4 pupils were receiving such education at the end of the year.

Maladjusted.—At the end of the year, 30 maladjusted pupils were receiving educational treatment in residential special schools. A report on the Child Guidance Service by Dr. D. R. Benady, Consultant Children's Psychiatrist, appears on page 45.

Speech Defective.—At the end of the year one pupil was in attendance at a special school for speech defective children. A report on the Speech Therapy Service appears on page 32.

Educationally Subnormal.—This is by far the largest single group of pupils in need of special educational facilities and during 1970, of 225 such children who were referred for assessment to the School Medical Officers and Educational Psychologists on account of lack of progress in the

ordinary school or for supervision on leaving school, the following recommendations were made:

Special Educational Treatment:

Ordinary School	2
Special Day Class	52
Special School	45
Home Tuition	1
Not Handicapped	50
Unsuitable for education at school	37
Friendly supervision on leaving school	37
Not requiring supervision on leaving school	1

The following existing provision for educationally subnormal children has been made by the Local Education Authority:

Special Schools (Residential, all ages):
Petton Hall for Boys (90 places)
Haughton Hall for Girls (72 places)
(12–15 places reserved for girls from Herefordshire which has no residential school for girls)

Units attached to Ordinary Schools (Age range 8–11 years):

Oswestry, Woodside County Primary	(15 places)
Shrewsbury, St. Michael's Street County Primary	(32 places)
Teagues Bridge County Junior	(15 places)
Ketley Town County Junior	(15 places)
Pool Hill County Junior	(15 places)
Ludlow, St. Laurence C.E. Junior	(15 places)
Market Drayton County Junior	(15 places)
(Age range 11–16 years)	
Shrewsbury, Belvidere Boys' Modern	(15 places)
Shrewsbury, Monkmoor Girls' Modern	(15 places)
St. Martin's Modern	(15 places)
Trench Boys Modern	(15 places)
Ludlow Modern	(15 places)
Wrockwardine Wood Girls' Modern	(15 places)

The total number of places available for Shropshire children is approximately 162 residential and 212 day places.

The Peripatetic Remedial Teaching Service is now established as a branch of the Special Education Services provided for handicapped children.

The Remedial Teachers (there is an establishment for 7 teachers) work in liaison with the Primary School Advisers and under the supervision of one of the Educational Psychologists. Preliminary surveys are carried out in groups of schools and a programme of remedial work is drawn up. Schools within the group are visited regularly by the Remedial Teachers and the retarded children are withdrawn from classes to receive special tuition. They work closely with Class Teachers and the needs of individual children are discussed so that even when the Remedial Teacher is not present the Class Teachers are able to continue the remedial work.

Children Unsuitable for Education in School.—There are some children who are so mentally retarded as to be incapable of benefiting from education even in special schools. During 1970, 74 such children were recommended for report to the Local Health Authority under Section 57 of the Education Act, as amended, for treatment, care or training; 37 under sub-section 4 as being unsuitable for education at school and 37 as being in need of friendly supervision after leaving school. The comparable figures for 1969 were 33 and 45 respectively.

The decision to report a child as being unsuitable for education in the ordinary school is taken only after very careful consideration of all the factors involved and usually after a trial period in the ordinary or a special school.

Supervision of School Leavers.—The handicapped school leaver poses a very real problem. The School Medical Officer, at the last routine medical examination of each pupil, makes a report if he considers a pupil unsuitable for work of any particular type. This report is forwarded by the Principal School Medical Officer to the Youth Employment Officer to ensure that any pupil on leaving school is not placed in employment for which he or she is either mentally or physically unsuited.

Handicapped pupils are also encouraged to enrol in the Register of Disabled Persons and so obtain through the Ministry of Labour sheltered employment and also special educational training open to Registered Disabled Persons.

Special arrangements exist to deal with the problem of after-care for pupils leaving Petton Hall and Haughton Hall Residential Schools, and the Mental Welfare Officers and Youth Employment Officers do, in suitable cases, visit the special schools before the children actually leave. Each case is then followed up at home to ensure that the child settles down in employment and becomes satisfactorily adjusted to post-school life.

In order that handicapped children may be kept constantly under review in the twelve months preceding school leaving and during the following five years, an After-Care Committee co-ordinates the efforts of the various bodies concerned, namely the Education, Health, Social Services Departments, and the Ministry of Labour's Rehabilitation and Youth Employment Service.

Home Visiting by School Medical Officers.—The School Medical Officers are given lists of handicapped children living in their areas and are expected to pay attention to these children in school or by home visiting. Some cases have to be referred to the Central Office for further advice and discussion.

It was considered, however, that many of these children whose names appeared on the Medical Officers' List are already being supervised by some means or other and consequently do not require any additional special attention. In these circumstances it was decided that as from 1st January, 1970 such visits should be carried out on a more selective basis and generally restricted to children in the 0—7 years age range. Children over the age of 7 years should normally be seen by the School Medical Officer in school conditions, although there may be the occasional case of a pupil over 7 years of age not attending school who will still require to be visited by the Medical Officer.

Health Visitors are, however, sent copies of all hospital discharges notifications, Consultants' reports etc. relating to children from 0—5 years to enable them to supervise these children and refer them to the local Child Health Centre if circumstances arise which necessitate their being seen by the Clinic Medical Officer.

Dr. Barker spent during the year approximately 3 or 4 half day sessions per week on home visiting. Sometimes accompanied by Miss M. E. M. Evans, the Social worker, Dr. Barker visited the homes of very young handicapped children to examine and assess them, to discuss the question of their educational future with the parents and in general to give them help and guidance in the understanding and management of their children. Details of these young children who were considered

suitable for attendance at the Katharine Elliot School for Handicapped Children, are passed to the Chief Education Officer. Mr. Davies, as Principal of the Katharine Elliot School, also visits with Miss Evans the homes of all those children who attend the school, or are recommended for future admission.

HANDICAPPED PUPILS REQUIRING HOME VISITING

	Pupils on List	*Number Visited*	*Number not Visited*	*Visits Made*
Blind	3	3	—	3
Partially Sighted	10	10	—	16
Deaf	—	—	—	—
Partially Hearing	1	1	—	1
Some Hearing Loss	1	—	1	—
Delicate	9	8	1	37
Epileptic	22	22	—	32
Maladjusted	1	1	—	1
Mentally Retarded	15	14	1	15
Physically Handicapped	233	191	42	269
Speech Defective	1	1	—	4
	296	251	45	378

Katharine Elliot School.—This school copes with a wide variety of handicaps and offers education, assessment and social training to about 50 or so children of ages ranging from 2—9 years.

The following account of this project has been contributed by Mr. N. O. Davies, The School's Principal.

"Because of the increasing prospects of survival of children who have been damaged before, during or after birth, the number of children in need of some form of special educational treatment has grown during the last few years.

Since the publication of the Principal School Medical Officer's report for last year there has, however, been a slight decrease in the number of children whose names are on the waiting list of the Katharine Elliot School. This has been due to the formation of an additional class at the beginning of the present school year. This is housed at the Monkmoor Girls' Secondary School and contains ten children who attend on five mornings per week. Children from this group who require physiotherapy are brought back into the main school for this purpose, and all the Annexe children return here for lunch.

It is envisaged that this class will be disbanded when the new special school opens at Telford in September, 1971.

Treatment and education, in its broadest sense, of handicapped children should be started at as early an age as possible and we at the Katharine Elliot School are looking forward to the opening of the Telford Special School. This will mean that some of the children now attending here will go to the new school. This, in turn, will mean that we will have room to admit younger children.

There are at present 53 children on roll and of these 32 attend on a full-time basis. The range of handicaps is wide but it is significant that over two-thirds of the children suffer from either cerebral palsy or spina bifida. Numbers according to handicap are as follows:—

Spina Bifida and/or Hydrocephalus		21
Cerebral Palsy		17
Osteogenesis Imperfecta		2
Blind or Partially Sighted		2
Amyotonia Congenita		1
Non-communicating		3
Autistic		2
Others		5
	Total:	53

Because of the nature of the work, many Health Department services devolve upon the School. Dr. A. D. Barker attends on an average of twelve sessions per month—for routine medical inspections and for discussion with staff about problems of the children in general. Dr. Barker and I meet monthly to consider the children whose names are on the waiting list.

Mrs. E. Inglis, Speech Therapist, attends for three sessions per week.

The physiotherapy department is staffed by Miss D. B. Woods, full-time, and two part-time therapists, Mrs. C. Duffy and Mrs. J. Lovell.

Miss E. M. Evans, our Social Workers, visits parents of children attending the school and also those whose names are on the Waiting List.

At the Katharine Elliot School, the adult—child ratio is high and we are able to give the handicapped child the concentrated attention of teachers, therapists and 'child care' staff that they need. Each child is helped to achieve maximum function so that he may 'make the most of what he has' within the limits of his overall capabilities.

The problem facing us is, "How can the best that we have to offer be matched with the best which the child is able to receive?"

Dr. A. D. Barker gives the following interesting report:

"I visit Katharine Elliot School every Tuesday.

I carry out routine medical inspections on each newly admitted child, deal with any problems arising, see parents and discuss their problems. I also carry out immunisations as required.

There are 53 children attending at present. When the school first opened 6 years ago the majority of children attending suffered from Cerebral Palsy but this has changed and now there are slightly more suffering from Spina Bifida than from Cerebral Palsy—between them they make up nearly 80% of the children.

Of the 53 attending:—

11 have a single handicap
13 have double handicaps
23 have treble handicaps
5 have quadruple handicaps
1 has five handicaps

The Spina Bifida children cause their parents and all who care for them considerable anxiety because of the various illnesses which arise as a result of their original defect. Many of them are

incontinent and frequently suffer from urinary infections and other serious kidney complications. Another cause of great anxiety is the possibility of the Spitz-Holter valve becoming blocked. This gives rise to symptoms of just being "off-colour" to becoming unconscious and having convulsions.

One child this year had to have an emergency exchange of the valve system and now, 9 months after this incident, although physically fully recovered he is considerably more mentally retarded than he was.

One Spina Bifida child has died following an accident at home when she received serious burns on her buttocks and legs while she was in her bath—these children have no sensation of pain in their paralysed limbs so at least she was saved this suffering but equally she was unable to get herself out of the bath or to call out and so indicate what had happened.

The Cerebral Palsied child also requires a great deal of help from physiotherapists, speech therapists and nursery nurses.

The degree of handicap varies from little physical defect involving perhaps an arm and leg to the seriously physically and mentally handicapped.

These children have to work very hard to overcome their physical difficulties and they become very frustrated, e.g. when they are unable to communicate by speech—but 'the joy' when they do finally manage to make themselves understood! Some, of course, never manage to do this.

Their illnesses are less dramatic but just as serious.

The remainder of the children attending suffer from various handicaps, e.g.

Muscular Dystrophy
Cretinism
Visual Handicaps
Disturbed behaviour, etc.

All the children enjoy coming to their day special school. This fact helps their parents to deal with the problems they have.

The parents are very appreciative of all the help they and their children receive from the Headmaster and Staff of this very special school."

SCHOOL REPORT OF THE PRINCIPAL DENTAL OFFICER

The Dental Service has had again a relatively good year. This has been helped enormously by staff stability. Mr. Heesterman who was Area Dental Officer for the eastern half of the County left the Council's employment to take up an appointment in Jamaica. He was replaced almost immediately by Mr. Small who comes to us from Hong Kong having been Director of Dental Services in the Colony. There have been other alterations in part-time appointments with a resultant slight loss to the Service in terms of whole time officers in post. On 31st December, 1970, however, there was a whole time equivalent of 10.69 Dental Surgeons and 2.8 Ancillaries in post.

This reasonably healthy situation is reflected in an all round increase in work output as follows—

Conservations (Fillings)	30,965	Increase: 2,374
Inspections	26,185	Increase: 509
Courses of Treatment Completed	10,107	Increase: 1,790
Prophylaxis	3,715	Increase: 1,965
Teeth Root Filled	72	Increase: 25
Inlays	14	Decrease: 1
Crowns	102	Increase: 40
Extractions	11,608	Decrease: 627

The decrease in the number of teeth extracted, it will be appreciated, is a heathy sign. The output of orthodontic work being carried out has also increased all round, especially in the number of cases completed.

It is a difficult business, however, trying to maintain a stable professional staff situation. In my last report I mentioned that it was hoped to establish a new pattern of dental inspection, the aim being to obtain as much information as possible concerning the child's dental health and to set this down on a standard form. This would also help us to assess the areas of the County having the greatest need for dental treatment.

Mr. D. A. Price, Senior Dental Officer, who has successfully completed the Diploma in Public Dental Health Course at Birmingham Dental Hospital, has produced some figures together with his conclusions. These I produce below. These figures together with Mr. Price's comments should give you some idea of why the Dental Service wishes to make use of the computer. With the development of Telford and the steady increase in population, a system such as this will be of invaluable help.

Report of Mr. D. A. Price, Senior Dental Officer

"A start was made in assessing the child dental health of the County by a series of epidemiological surveys and the following information collected:—

School	Hadley Modern	Cleobury Mortimer Modern	Bishop's Castle Comprehensive	Shifnal Modern	Bridgnorth Boys' Modern	Whitchurch Grammar
Number of Children Examined	205	136	121	75	70	58
Mean Age in Years of Children Examined	12.5	12.5	12.4	13.7	11.7	11.9
Mean Number of Decayed Teeth	1.2	1.2	1.2	1.8	1.2	0.9
Mean Number of Missing Teeth	0.7	0.7	0.6	0.6	0.8	0.4
Mean Number of Filled Teeth	1.6	2.2	2.4	4.4	1.7	2.2
Mean Number of Decayed, Missing and Filled Teeth	3.5	4.1	4.2	6.8	3.7	4.1

Differences in the age, sex and social class of the groups examined due to deficiences in the method used, make detailed comparison possible. A modification of this system is at present being developed to allow the data collected to be processed on the County Council's computer so as to minimise these inaccuracies and allow precise establishment of priority areas.

Some trends can, however, be noted from the above mean figures. Contrary to what would have been expected, children at Shifnal Secondary Modern had a high level of treatment as shown by the number of teeth filled. Pupils at Whitchurch Grammar also showed a high level of teeth filled and a small number of teeth extracted, indicating successful dental treatment. Pupils at Bridgnorth Modern and Hadley Modern, however, had a low level of treatment indicated by a small number of fillings per child while the number of missing teeth was fairly high, indicating extensive emergency treatment. It would, therefore, appear that children at Hadley and Bridgnorth Modern Schools are in particular need of extra provision of dental treatment."

A feasibility study has already been drawn up and it is hoped to give more information in my next report. In addition the feasibility of centralising all records, and appointment systems into the computer, is being examined.

5A Belmont Clinic	Work on modernisation of surgeries and the reception area was completed in May this year, and it is hoped that the laboratory, office and staff room area will be completed next year. The Belmont Clinic is now a pleasant place in which to work. We are proud of the fact that work continued during the surgery alterations and will continue so during the completion of the laboratory area.
Wellington Dental Clinic	Construction of the Health Centre has commenced and it is hoped to have four surgeries in this Centre. The Wellington area is relatively well serviced by general dental practitioners but as will be seen from Mr. Price's reference to the children of Hadley, there is a great need for dental treatment there. It is hoped that the new centre will be completed reasonably early in the New Year.
Mobile Clinic	It is hoped to convert the Mobile Dental Clinic at present being used at Wellington as an additional surgery, into an inspection unit and dental exhibit. This work would be carried out by the Roads and Bridges Department. The necessity for a good inspection facility at schools has been apparent for some time, and now more so with the advent of a more detailed inspection programme.

Mr. N. Gleave, Senior Dental Officer for Ludlow, commenced the D.D.P.H. Course at Birmingham this year and I wish him every success.

I wish to thank the staff for their continued effort and hard work.

Work done during the year (these figures include those relating to the Mobile Units):

Attendances and Treatment :	*Ages 5 to 9*	*Ages 10 to 14*	*Ages 15 and over*	*Total*	
First Visit	3,821	3,378	793	7,992	
Subsequent visits	9,624	10,872	3,020	23,516	
Total visits	13,445	14,250	3,813	31,508	*
Additional courses of treatment commenced	798	590	120	1,508	
Fillings in permanent teeth	5,824	13,172	4,152	23,148	
Fillings in deciduous teeth	7,466	351	–	7,817	
Permanent teeth filled	4,215	10,793	3,524	18,532	
Deciduous teeth filled	6,558	298	–	6,856	
Permanent teeth extracted	359	1,873	532	2,764	
Deciduous teeth extracted	7,093	1,751	–	8,844	
General anaesthetics	2,324	1,225	191	3,740	
Emergencies	679	455	130	1,264	
Number of Pupils X-rayed				823	
Prophylaxis				3,715	
Teeth otherwise conserved				1,756	
Number of teeth root filled				72	
Inlays				14	
Crowns				102	
Splints				14	
Gold posts				7	
Courses of treatment completed				10,107	

*In addition 2,432 visits were carried out by the Dental Hygienists.

Orthodontics :

New cases commenced during year	171
Cases completed during year	164
Cases discontinued during year	15
Number of removable appliances fitted	305
Number of fixed appliances fitted	55
Pupils referred to Hospital Consultant	–

Prosthetics :	*Ages 5 to 9*	*Ages 10 to 14*	*Ages 15 and over*	*Total*
Pupils supplied with F.U. or F.L. (first time)	1	–	3	4
Pupils supplied with other dentures (first time)	7	38	29	74
Number of dentures supplied	11	56	53	120

Anaesthetics :

General Anaesthetics administered by Dental Officers	174

Inspections :

(*a*) First Inspection at school. Number of Pupils	17,158
(*b*) First Inspection at clinic. Number of Pupils	6,764
Number of (*a*) + (*b*) found to require treatment	15,959
Number of (*a*) + (*b*) offered treatment	14,560
(*c*) Pupils re-inspected at school or clinic	2,263
Number of (*c*) found to require treatment	1,575

Sessions :

Sessions devoted to treatment	5,080
Sessions devoted to inspection	154
Sessions devoted to Dental Health Education	100

	Adminis-trative sessions	Number of clinical sessions worked in the year					Total Sessions
		School Service			M. & C.W. Service		
		Inspection at School	Treatment	Dental Health Education	Treatment	Dental Health Education	
Dental Officers (incl. P.S.D.O.)	226	150	3,640	3	198	*	4,217
Dental Auxiliaries			1,188	7	56	*	1,251
Dental Hygienists			424	90	6	*	520
Total	226	150	5,252	100	260	*	5,988

* Although no specific figures are available Dental Officers, Dental Auxiliaries and Dental Hygienists give Dental Health Education as the occasion arises in their duties.

The Dental Hygienists carried out the following Dental Health Education work:—

95 visits to schools, 90 sessions in schools. Number of children attending talks—8,365. Dental Auxiliaries devoted 7 sessions to Health Education Work.

Under the provisions of Section 78 of the Education Act, 1944, all the pupils (approximately 90) of Condover Hall School for the Blind were dentally examined and treatment carried out as necessary.

C. D. CLARKE, *Principal Dental Officer.*

SPEECH THERAPY

It was a pleasure to have Mrs. P. Moorley (née Burningham) appointed to the staff in April; however the see-saw movement of staff continued with the resignation of Mrs. M. Avison in September. At the close of the year there had been a nett gain of 3/10 of a Therapist! The staff, at the time of writing comprises:—

1 Senior Speech Therapist
3 Speech Therapists (full-time)
1 Speech Therapist (equivalent 3/10 full-time Speech Therapist)

The figures in the following tables show an increase in the number of patients seen, compared with the previous year.

During the Easter and Summer vacations two interesting projects were carried out; these took the form of intensive treatment courses. At Easter a group of twelve children, all with a very poor linguistic standard, and in the summer eight children, all with stammers as the main cause of their difficulty, were selected for the intensive courses.

The parents were unanimous in their approval of the scheme and arrangements were made, where necessary, to transport the children to and from the Adult Training Centre in Shrewsbury where this temporary Clinic was held at Easter. The twelve children, ten boys and two girls, between the ages of five and eleven years, attended from Monday to Friday of one week from 9.30 a.m. to 3.30 p.m. daily. There was an hour allowed for lunch and a ten minute break during the mornings and afternoons.

On the first day each child underwent an articulation test and made a recording of his speech and on the final day these were repeated. During the week speech-orientated games and projects occupied the group and each child was given repeated ten minute periods of individual treatment.

The results showed a definite gain in progress by all the children—when this was measured on an articulation score it showed an average improvement of 11.4%. In some children with a severe language problem they progressed from monosyllables to four or five word phrases.

Socially, they all developed in different ways, for instance, aggressive tendencies came to the surface and one stubborn child became more amenable, the children began to correct themselves and each other and as the week progresses there was a general atmosphere of well-being and co-operation.

At the summer course, which was held at Shrewsbury Junior Training Centre, eight boys between the ages of seven and twelve years attended. Initial fears that the boys would not integrate because of the varying ages and backgrounds were found to be unjustified. All the children, except one, came within the severe stammering category when tested on an adapted perception of stammering inventory.

On the first day each boy's reading was timed and recorded; at the end of the week the test was repeated. In each case there was a measurable improvement and an interesting correlation between higher score and higher age group.

The results of these courses showed the value of intensive group therapy far outweighing weekly individual treatment; in all cases the parents confirmed that they had noticed an improvement. However, a more scientific approach needs to be thought out prior to any such future intensive courses with a variety of treatment methods being used in order that the benefits of each can be compared.

During the year at least a dozen school pupils have visited clinics, discussed speech therapy as a career and been advised by the staff on training facilities. It is to be hoped that at some future date we will have some of these persons returning to work in this County when they are qualified.

On 27th January, Mrs. M. Avison attended a four day study conference for Speech Therapists at Torquay. The theme of this course was "Adult Acquired Dysphasia". Mrs. E. Inglis attended a speech therapy course at Manchester from 7th to 11th September. The other members of staff were all interested to receive comprehensive reports from their colleagues on these courses.

In June a student from the Dublin School of Speech Therapy spent a month in this County visiting all our Clinics as part of her training. It is hoped that we will be asked in the future to provide similar facilities for students from other training centres in the British Isles.

At the end of 1970 Speech Therapy Clinics were being held at the following Centres:

	Morning	Afternoon	Evening
Monday	Oswestry C.H.C. Katharine Elliot School Whitchurch C.H.C.	Market Drayton C.H.C. Oswestry C.H.C. Wellington C.H.C.	
Tuesday	Katharine Elliot School Murivance C.H.C.	Eye, Ear and Throat Hospital Murivance C.H.C.	Eye, Ear and Throat Hospital
Wednesday	Madeley C.H.C. Oakengates C.H.C. Petton Hall School Haughton Hall School	Albrighton County Junior School Dawley C.H.C. Oakengates C.H.C. Sutton Hill C.H.C.	
Thursday	Donnington Infants' School Ludlow C.H.C. Teagues Bridge Infants' School Shrewsbury Junior Training Centre	Albrighton County Junior School Bishop's Castle C.H.C. Eye, Ear and Throat Hospital Ludlow C.H.C. Wellington Junior Training Centre	
Friday	Bridgnorth C.H.C. Katharine Elliot School	Bridgnorth C.H.C. Wellington C.H.C. Condover Hall	

During the year 1970, the total number of children who were given speech therapy was 802. The following table gives particulars of the conditions which necessitated their attendance:

Condition	No. of cases treated
Stammer	73
Cleft palate	11
Severe dyslalia	59
Nasality + or —	5
Dyslalia	460
Voice defect	2
Mongolism	31
Non-communicative	24
Partially hearing	10
Educationally subnormal	15
Dysarthria	8
Mixed defect	36
Dysphasia	11
Mental defect	17
Language defect	40
TOTAL	802

The following table gives particulars of the 377 children who were discharged:

Normal	Substantially Improved	Unlikely to benefit from further treatment		Left School or Ceased	Referred to Other Services	TOTAL
		Slightly Improved	Unimproved			
190	59	23	3	44	58	377

In a small number of cases, discharge is temporary and children can attend later for further treatment.

In addition:

388 children made single visits to centres for advice.
193 visits were made to individual homes.
72 visits were made to schools to see children and discuss cases with teachers.

E. PAULETT,

Senior Speech Therapist.

AUDIOLOGY

A training course in the basic principles of audilogy designed for School Medical Officers and Health Visitors was held in Shrewsbury during two weeks of January. Invitations were extended to neighbouring Authorities and acceptances were received from Flintshire, Denbighshire and Walsall; in all 15 persons formed the groups.

With the appointment of Mrs. C. Healey, in September, as Audiometrician/Vision Tester, the audiology team, at the time of writing consists of:—

Audiologist	1
Medical Officers	8
Nursing Staff	26
Audio/Vision Testers	3

In May, the Senior Medical Officer, Dr. Rhys Jones, and the Audiologist visited the Royal School for the Deaf, Birmingham, and the Charles Burns Clinic, Birmingham, in order to discuss the admission and progress of various children from Shropshire.

The Audiologist and Peripatetic Teacher of the Deaf continue to work in conjunction, dovetailing within their sphere, the functions of the Health and Education Departments. This occasionally means giving help wherever possible to neighbouring Counties, and has for instance, involved close liaison and case conferences with other Local Education Authorities.

In September a new Unit for Partially Hearing Children was opened at St. Andrew's School, Shifnal but fuller information on this is given on page 42 of this report by Mr. J. P. Jones. In the same month the fourth annual Residential Course for parents of hearing impaired children was held at Shrewsbury Junior Training Centre. The parents and staff were pleased to have Dr. L. A. Hamar, Chairman of the Health Committee and Mrs. N. B. Hodgson, Vice Chairman of the Health Committee taking the chair over the two days and showing such involvement and interest in the problems of the parents. A panel made up from representatives of Rolls Royce, Silhouette (Shrewsbury), the Shrewsbury Chronicle and the Department of Employment and Productivity, gave their views and answered questions on the employment of deaf adolescents.

Dr. Esther E. Simpson, Principal Medical Officer at the Department of Education and Science spoke on the diagnosis and assessment of children with impaired hearing.

Mr. D. K. Burton, Principal Welfare Officer at the Institute for Adult Deaf and Dumb in Liverpool gave a talk on the problems of adolescence and Mr. P. Gaskill, Principal of the Royal Cross School, Preston, spoke on behaviour problems. Miss F. E. M. Sinclair, Miss C. V. Green, Miss P. J. Ellis, and Mrs. J. P. Jones, Teacher of the Deaf lectured on and demonstrated the type of work being carried out in Partially Hearing Units and by the Peripatetic Service in this County.

Over the two days, 25 different families from Shropshire and neighbouring Counties (46 adults and 48 children) attended, and also present were 80 members of staff and other interested persons including the Chairman of the Welfare Committee and the County Welfare Officer.

In October the Audiologist attended the three day annual conference of the Royal National Institute for the Deaf held in London.

A handbook 'Hearing Loss', for those concerned with the hearing impaired child in the normal school, which had been prepared by the Audiologist and Mr. J. P. Jones, Peripatetic Teacher of the Deaf, was printed and published by the County Council. The first print in March, of 500 copies, was distributed free of charge to all schools in the County and to various other interested bodies. In August another 1,000 copies were printed and sold at 25p per copy. These have been purchased by Authorities and individuals all over the country and even as far as New Zealand, Newfoundland, U.S.A., and South Africa. In December 500 copies were being printed and 150 of these have already been ordered.

The film 'Audiology with Children,' made in the Department in 1968, continues to be in demand all over the country and was shown on 18 occasions during the year, the Audiologist lecturing on 10 of these occasions in this County.

Consultation Clinics to which parents are invited to discuss any problems with the Audiologist and Peripatetic Teacher of the Deaf were again arranged. The original idea for these sessions came from the parents at a previous week-end residential course and were first organised during 1969. This year, 46 families were given the opportunity to attend at a Child Health Centre near their home or arrangements were made for a visit to be made to their own homes. The replies to the invitations numbered 31, and 17 groups of parents actually attended at Child Health Clinics and 6 were seen at home.

The year ended on a very pleasant note with a social event for parents, staff and friends arranged by the host, Dr. P. C. Moore, County Medical Officer of Health, the President of the Shropshire Region of the National Deaf Children's Society.

An Audiology Refresher Course for all Audiology Trained staff was held in the Shirehall on 22nd December and this included discussion on Medical Audiology Clinics, the carrying out of testing techniques for children under 5 years and a lecture by Wing Commander N. Vincenti, Consultant in Otorhinolaryngology, R.A.F. Hospital, Cosford.

Infant Hearing Tests.—The decision was made that as from the first day of 1970 the "at risk" register would be no longer maintained; instead of a small specific group being given a screening test of hearing, *all* young babies were to be given the opportunity. Information is obtained from computer data on all live births attributable to the County and the parent of every child aged 8—9 months was offered an appointment to bring her baby for a screening test of hearing and vision. As testing procedures commenced on 1st January this group included, initially, all children born in the County during the last nine months of 1969.

Screening tests of visual acuity and squint of these babies were also carried out by the audiology team at combined hearing and vision clinics and the results of vision tests are given on page 8 of this report.

The number of babies tested was 3,538, the result of hearing tests being summarised in the following table:—

HEARING TESTS PERFORMED ON BABIES

Number Referred		Number Tested	Number Passing	Number for Re-Test	Number referred to Audiologist
New Cases	5,955	3,538	3,387	144	7
Re-test Cases	137	75	61	6	8
TOTAL	6,092	3,613	3,448	150	15

This table shows that only 59.9% of the appointments given for tests were accepted and of those failing the test first time only 54.7% came for a re-test! It would seem that the field of Health Education is wide open at this point to indicate to parents the work aims of the Health Department, the simplicity of testing and the benefits that are derived from early diagnosis of any defect.

When a mother suspects that something is wrong with her child she is, more often than not, correct, and attention should always be paid to her doubts. However it is surprising how many parents, especially the father, have to be thoroughly convinced, by repeated tests, that there is some defect present.

Infants between the ages of 1–5 years are still referred by parents, doctors and Health Visitors and the results of tests performed on 315 of these is shown in the following table:–

INFANT HEARING TESTS PERFORMED

Number Referred		No. Tested	No. Passed	Failed or did not co-operate		
				For Re-test	For Audiologist	For Dr.'s Clinic
New Cases	424	315	260	22	26	7
First Re-test	77	44	34	3	5	2
Subsequent and review cases	41	24	11	3	4	6
TOTAL	542	383	305	28	35	15

It is interesting to note that with this age group of children, the attendance rate has risen to 74.3%.

The following are particulars of home visits to children under 5 years which the Audiologist and Health Visitor carried out during the year:–

122 Home visits by Audiologist
101 children seen:–

Discharged	68 *
Referred to Hearing Assessment Clinic	11
Referred to Medical Audiology Clinic	8
Left County	1
Referred to Health Visitor for conditioning	2
Retest by Audiologist	11
	101

** 11 of these children were referred to the Speech Therapist.*

Sweep Frequency Testing

SWEEP FREQUENCY TESTS PERFORMED

Number of Schools Visited	Category	Number Tested	Normal	(25/30db loss) Surveillance at school	(30db + loss) Hearing Suspect
156	Primary School Children	12,234	10,707	728	799

These screening tests of hearing are given in conjunction with a test of vision and are carried out by the three audiometrician/vision testers prior to school Medical Inspections. The results of the vision tests are shown on page 8. The table above shows a failure rate of 6.5%. The children who fail the test are referred to a Medical Audiology Clinic.

Results of Tests at Medical Audiology Clinics

Referred by	Cases	No. Referred	No. Tested Age Groups: Under 5	Primary	Secondary	Discharged	Type of Hearing Loss—For Review: Slight	Mild	Marked	Severe	Extreme	Not Classified	Total New Cases	Total Review Cases
Sweep Test	New	834	—	599	17	259	300	37	6	—	—	14	616	—
	Review	945	—	607	121	198	435	59	15	2	—	19	—	728
School Medical Officer	New	262	—	144	41	107	56	10	5	—	—	7	185	—
	Review	271	—	129	67	43	122	14	8	4	—	5	—	196
Family Doctor.. ..	New	63	3	43	5	20	22	4	2	—	—	3	51	—
	Review	69	2	49	4	16	32	2	2	1	—	2	—	55
Health Visitor/School Nurse	New	46	3	33	4	15	14	4	1	—	—	6	40	—
	Review	74	1	50	7	7	41	7	2	—	—	1	—	58
2 H.P. Case	New	45	—	19	8	17	9	—	1	—	—	—	27	—
	Review	12	—	2	6	5	3	—	—	—	—	—	—	8
Deaf Teacher	New	3	—	3	—	2	1	—	—	—	—	—	3	—
	Review	6	—	1	3	1	1	—	1	—	—	1	—	4
Head	New	36	1	12	17	15	14	—	—	—	—	1	30	—
	Review	52	—	24	7	12	11	6	1	1	—	—	—	31
Speech Therapist ..	New	20	1	11	—	8	2	1	—	—	—	1	12	—
	Review	18	—	11	5	4	9	1	1	1	—	—	—	16
Aural Surgeon	New	54	4	34	5	9	25	5	—	—	—	4	43	—
	Review	108	—	67	7	20	43	3	1	—	—	7	—	74
Infant Assessment Clinic..	New	24	11	8	—	4	8	1	—	—	—	6	19	—
	Review	55	11	30	2	7	27	4	—	—	—	5	—	43
Parent	New	116	7	76	10	29	51	6	1	—	—	6	93	—
	Review	133	—	89	15	29	59	7	4	—	—	5	—	104
Others	New	19	1	12	2	5	4	2	1	—	—	3	15	—
	Review	14	—	9	3	5	7	—	—	—	—	—	—	12
Totals ..		3,279	45	2,062	356	837	1,296	173	52	9	—	96*	1,134	1,329
			2,463			2,463							2,463	

Medical Audiology Clinics.—In addition to the screening failures mentioned above, other sources of referral include School Medical Officers, Speech Therapists, Head Teachers, Teachers of the Deaf, Child Guidance Clinic, Medical Practitioners, Otologists and other Hospital Specialists.

*This figure includes cases where the Medical Officer was unable to diagnose definitely any permanent hearing loss. The children concerned may, at the time of examination have been suffering from such conditions as colds, catarrh, etc., or have had wax in the ears. In order not to inundate the Otologist with unnecessary referrals these children were called for further investigation before a final decision or recommendation was made.

Following attendance at the above Clinics, recommendations and referrals were made as follows:

Recommended to sit in an advantageous position in class	232
Notified to the Head of the School for information and guidance	102
Notified to the Teacher of the Deaf to visit and advise in school	23
Referred to–	
–Speech Therapist	30
–Educational Psychologist	16
–Family doctors for treatment	13
–Ear, Nose and Throat Specialists	7
–Hearing Assessment Clinic, for a final decision operative treatment, special educational placement or the provision of a hearing aid	209
–Admission to Partially Hearing Unit	1
–Audiologist	5
–Child Guidance	6
–Youth Employment Officer	1

Commercial Hearing Aids—For certain pupils suffering from specific types of hearing defects, the ordinary National Health Service "Medresco" hearing aid is not entirely suitable, and in such cases, on the recommendation of the Aural Surgeon and the Audiologist, a special commercial hearing aid is provided by this Authority. In 1970 it was not necessary to provide any such commercial hearing aids for Shropshire pupils.

Hearing Assessment Clinics.—These are attended by Mr. E. N. Owen, F.R.C.S., Aural Surgeon to the Eye, Ear and Throat Hospital, Shrewsbury, the Audiologist, a Teacher of the Deaf, and Audiology Technician from the Hospital Group, one of the School Medical Officers and one of the specially trained Health Visitors. Those held at R.A.F. Cosford are attended by the Senior Specialist in Otorhinolaryngology, a School Medical Officer and the Audiologist.

Each child is thoroughly assessed by the Specialists in attendance and the parents are advised and given any help and guidance required. The family doctor is notified that the child will be attending for assessment and is always advised of the outcome, as are the Head Teacher of the child's school and the Education Department.

In 1970, 35 Hearing Assessment Clinics were held, 10 of these being at R.A.F. Hospital, Cosford and 332 appointments were offered. The acceptances were 299, and of these 205 were new cases and 94 called for review, giving an attendance rate of 90.1%. The following recommendations were made:—

Number Referred		Source of Referral	No. Att.	Age Range			Recommendation													
				0–4	5–10	11–18	Hospital Treatment	Family Doctor	Treatment by Nurse	Other Consult-ants	Other Services	Issue of Hearing Aid	Auditory Training	Special care in ordinary School	Admission to Partially Hearing Unit	Admission to Res. Sch. for Deaf	Admission to Special School	Review at Hearing Assessment Clinic	Review at Medical Audiology Clinic	Discharge
New	159	School Medical Officer	147	1	136	10	67	4	—	2	2	8	—	107	—	—	—	14	132	1
Review	73		63	—	51	12	27	2	—	—	1	4	—	39	—	—	—	13	49	7
New	52	Audiologist	48	17	24	7	19	—	1	—	1	9	5	18	3	—	—	4	41	—
Review	27		23	5	17	1	4	—	—	1	3	8	1	8	2	1	—	8	13	—
New	10	Otologist	9	1	6	2	2	1	—	1	—	1	1	5	—	—	—	3	6	—
Review	8		6	—	4	2	4	—	—	—	—	2	—	4	—	—	—	—	6	—
New	1	Out-County	1	—	1	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—
Review	2		2	1	1	—	—	—	—	—	1	1	—	1	—	—	—	—	1	—
Totals New	222		205	19	167	19	88	5	1	3	4	18	6	130	3	—	—	21	180	1
Totals Review	110		94	6	73	15	35	2	—	1	5	15	1	52	2	1	—	21	69	7
	332		299	25	240	34	123	7	1	4	9	33	7	182	5	1	—	42	249	8

Working closely with Dr. E. J. H. Foster, Deputy County Medical Officer of Health, the Audiologist carried out a Noise and Hearing Survey at the Shrewsbury Adult Training Centre. The object was to test the hearing of the trainees at Shrewsbury Adult Training Centre and select a group of males and females who would give consistent responses to pure tone audiometry, have hearing within normal limits, and have no apparent history of ear disease.

This selected group of "otologically pure" subjects would have their hearing tested at the beginning of a normal working week (Monday a.m.), and the end of the first working day (Monday p.m.), and again at the end of the same working week (Friday p.m.).

Measurements of the noise levels in the working environment of the trainees would be taken and an analysis of the three hearing tests be made in order to judge whether any noticeable threshold shift was detectable after one working day and after five working days.

The results of the hearing tests made on the trainees who have apparent hearing losses would be notified to their own family doctors in order that they might take any action they consider necessary.

A summary of the findings showed that an attempt was made to test the hearing by pure tone audiometry of 68 trainees at Shrewsbury Adult Training Centre. This was possible with 60 of the subjects and of the 21 found to have hearing within normal limits 16 (8 of each sex) were selected as the group on which a study was made to observe any effect noise of the work environment on their auditory thresholds. The hearing of 36 trainees was retested; 8 passed, 3 failed to co-operate, 11 had very slight hearing loss and 14 were referred to the family doctors for any necessary action. The vision of 12 trainees was retested and the results were also passed to the family doctors concerned.

Measurements of the noise in the workshops were made using a sound level meter and this was found to be between the range of 68 dBA—105 dBA with occasional impulses.

The conclusions arrived at were that:—

1. The noise in the workshops is not excessive for the type of work undertaken and is not constant for the whole of the working day. One would expect some permanent threshold shift from daily exposure to 100 dBA for 2 years, or daily exposure to 90 dBA for 20 years, or daily exposure to 10 dBA for 1 year followed by daily exposure to 90 dBA for 10 years.

2. Allowance must be made for the type of person tested and their possible unreliability.

3. It was interesting to observe that the trainees co-operated much better and were more at ease if two or three underwent tests in the same room at the same time. Rather than a distraction this appeared to help their concentration but of course this was no way to standardise the test procedure.

4. The majority of subjects at the end of the test week showed an improvement in results, possibly because they became more used to the procedure.

5. Because of the unreliability of the small number of subjects under test, the necessary test procedure and complete lack of clinical conditions in the test rooms, the results are completely invalid.

In July, Michael B. Parsons, M.A., Lecturer in Education of the Deaf, Christchurch, New Zealand, made a visit to several countries and, on his way to the World Congress on Deaf Education in Stockholm, paid a visit to Shropshire. In his report to the McKenzie Education Foundation he states that he was able to observe all aspects of the Audiological services provided and that "this was a

helpful visit and I was able to collect considerable material of relevance to our training programme. The effectiveness of New Zealand screening programme needs to be continually reassured!"

Although it is cheering to know that in this County we have an audiology service that is good and efficient it is somewhat embarrassing to explain to visitors that there is no specific "Speech and Training Centre" available. It does seem essential that consideration should be given to obtaining some suitable premises in which standardised testing and clinical work can be achieved. Audiological work, for instance, has been carried out on many occasions in noisy cramped offices, telephone boxes, lavatories and a V.D. Clinic and always using lightweight "limited-function" equipment.

The fact that the service is good is because of the enthusiasm of the audiology team, the encouragement and backing received from the County Medical Officer and the Consultant Otologists and also because of the hard work of the staff of the Child Health Section, all of whom I would like to thank.

E. PAULETT,
Audiologist/Senior Speech Therapist.

PARTIALLY HEARING CHILDREN

Mr. J. P. Jones, Peripatetic Teacher of the Deaf for the County, gives the following interesting description of his work.

"The most recently provision for the education of partially hearing children was the opening in September of the two special classes at St. Andrew's C.E. School, Shifnal. There are 7 children in the Nursery/Infant Class and 8 in the Junior Class. Most of the children come from the Telford area.

The term 'unit' has been avoided because it implies something which is isolated from and unconnected with the main school. At Shifnal the children and the two qualified teachers of the deaf in charge of them are looked upon as being part of the main school. The hearing-impaired children integrate with the normally hearing children; this does not only apply at playtimes and mealtimes, but also in normal classes for academic subjects if they are able to cope with the subject matter.

It was unfortunate that due to unforeseen circumstances the amplifying equipment which had been ordered in good time, was not supplied by the firm responsible until the second half of the term. There was also difficulty in obtaining the special National Health hearing aids needed when using the loop system.

Some problems with the equipment still have to be overcome, but despite the snags the two classes appear to be working well because of the close co-operation of all involved.

Coleham Partially Hearing Unit

17 children attend this unit. There are two classes for nursery, infant and junior children. The staff consists of two qualified teachers of the deaf, a part-time teacher who has had a lot of experience with hearing impaired children, and a part time ancillary helper.

Regular meetings of the National Deaf Children's Society (Shropshire Region), were held in the unit throughout the year, with talks given by many experts in different fields of deaf education.

At some meetings it was embarrassing because the teachers present outnumbered the parents!"

Peripatetic Service

"Some thought has been given to the term 'peripetetic' during the year because we have tried to think of a more suitable title. 'Peripatetic Teacher of the Deaf' is not always an accurate description and not everyone understands what peripatetic means, especially the parents. Some headteachers avoid the term by referring simply to 'the partially hearing teacher'!

We were very pleased in February, 1970, when we were able to move into our permanent base at Meole Brace Secondary Modern School.

The booklet 'Hearing Loss', written for those concerned with the hearing impaired in the normal school, was completed, approved and printed. Copies were sent to all the Headteachers in the County. It was hoped that the teachers would have easy access to the booklet by having it displayed prominently with the other educational literature on staff notice boards. Yet only one copy has been seen and one can only guess that the others are hidden away in cupboards and drawers!

Children home from residential schools were visited by the Peripatetic Teacher of the Deaf and the Audiologist during the holidays. The children's progress was discussed and parents were helped with any problems that were worrying them.

The work of the Peripatetic Teacher of the Deaf fell very roughly into four categories:—

Educational	Administration	Medical	Miscellaneous
Parent Guidance. Auditory Training. Speech Correction. Language Development. Teaching in homes and schools. Visiting homes and schools. Supervising a Partially Hearing Unit.	General office work. Reports and Records. Ordering Equipment.	Collecting and distributing ear moulds and hearing aids. Assisting at Hearing Assessment Clinics	Talks and demonstrations to children, parents and teachers. Assisting at Consultation Clinics. Regular discussions with the Audiologist.

A vital part of the peripatetic teacher's rôle has been visiting hearing-impaired children in the normal school and advising their teachers. The aim has been to create a favourable climate in which the children can work and to ensure that they are making satisfactory progress. If they are not, then the appropriate action is taken.

Many teachers with hearing-impaired children in their classes were given help in understanding the problems of deafness and the educational implications of hearing impairment. They were shown how to make it easier for children to lip-read and given instructions about the use and simple maintenance of hearing aids. In fact they were given any information that was necessary to make the children's problems easier in modern classroom situations.

During the year, 564 visits were made to 274 different children at home or school. 90 different schools were visited. 78 of the children were seen regularly, either weekly, fortnightly, monthly or twice a term, depending on their individual needs. The Peripatetic Teacher also attended 21 sessions of the Hearing Assessment Clinic and 8 sessions of the Consultation Clinic.

The following table shows how many children wear National Health hearing aids in the normal school, (excluding those in Partially Hearing Units), the type of aid used and how they are distributed.

Schools	Type of Aid	
	OL 67 (head worn aid)	OL 56 (body worn aid)
Infant and Junior	24	13
Secondary	54	7
	78	20

TOTAL 98

A disturbing factor was the large number of children in Secondary Schools issued with hearing aids who did not wear them. Regularly 'nagging' the children and staff has not improved the situation yet.

One young lady referred to us was 29 years old and she had recently moved into the County. She could not read, write or tell the time. It was felt she was capable of learning if given the right kind of help and encouragement.

A lady teacher of her own age was found for her through The Further Education Department. The girl was fitted with a hearing aid and given the loan of a Speech Trainer. After only six weeks she had made good progress, but regrettably she is now to move out of the County again.

Fortunately all the agencies responsible for hearing impaired children work very closely together and I would like to thank all those concerned for their help and co-operation."

Unit for Partially Hearing Children, Meole Brace Secondary School

Miss F. E. M. Sinclair, Teacher in Charge, writes:—

"The unit now has 14 children. They consist largely of children who began their education at the Coleham Partially Hearing Unit.

More integration has been put into operation since September 1970. Problems arise from this as individual children have difficulties with different subjects. The third year group have settled to this integration very well, the second year particularly enjoy the main school, whilst the first year are "finding their feet" socially with their hearing friends.

The first year have more individual help and spend more time in the Unit than the others and some receive extra help with basic subjects in the remedial department. All other work is done in unstreamed classes.

Medical inspections have been held regularly twice a year when specific problems, not all related to hearing loss, have come to light.

Orders are now in hand for four Eckstein portable hearing aids for the children who find difficulty in hearing teaching staff in certain rooms. These will be borrowed by the children who need them, returned to the unit when not in use and taken out by others.

Social integration is proceeding well in most cases, but some of the children are still rather shy of joining in fully with class activities. This, however, can only improve with the passage of time.

Home visits have been made each holiday since September 1970 in conjunction with Mr. Paulett, with the aim of covering all homes in a year."

CHILD GUIDANCE SERVICE

Dr. D. R. Benady, Consultant Child Psychiatrist, gives the following account of the work carried out by the Child Guidance Service during 1970:

"There seems to be an increasing awareness in the public at large of the complexities of mental health and this appears to be reflected in the interest shown in disturbed children. Nearly 1% of the school population of Shropshire was referred to the Clinic in the past year.

Although only a small number of these children is very disturbed, the total referred must reflect, in part, the need of the community to help children in distress.

The General Practitioners continue to make increasing use of the Service, whilst other referring agencies are fairly constant in proportion compared with last year.

The Clinic staff was stable, except for the change of a Social Worker. Miss Corfield left to take up further training and we wish her well. In spite of her handicap, she contributed great understanding and support to worried mothers. Mrs. Bliss, Social Worker, joined us in her stead. Her past experience and knowledge of the County make her a welcome staff member.

Students from Keele University continue to attend the Clinic for their case work placement and we were delighted to hear that three of our own students obtained their diplomas with merit.

Dr. Robertshaw left after a short time with us, due to ill health, and he has been replaced by Dr. Allan. Dr. Pemberton obtained a Consultant post combining child and adult psychiatry. He is greatly missed. Application has been made to the Regional Hospital Board for a full-time Senior Registrar to the Clinic and Child Psychiatry Department of Shrewsbury Hospital Management Committee who will rotate to the Birmingham training scheme after two years here.

For the fifth year running, we continue to have the same deficiencies in the help we can give to seriously disturbed young children and adolescents over 14 years of age. There are a few special educational places available for them and they create a problem disproportionate to their numbers.

We continue to liaise with social and hospital agencies to the best of our abilities, but pressure of work sometimes makes this difficult. We were, however, pleased to welcome countless colleagues at our case conferences.

Our researches into the social and psychiatric disturbances of consciously rejected children are nearing compeltion and should shortly be published.

We have continued to develop Clinics at Telford, as well as to maintain our Service into the rest of the County. There is no doubt that we are now over-stretched and that we have reached the limit of useful work that can be done with available staff. I do not think we shall be able to meet any additional demands from other agencies, such as the new Social Service Department without an increase in all staff. Child Guidance Clinics were the first agencies which integrated different disciplines to help children. Even now we remain tripartite, that is, Social Workers are provided by the Health Department, psychologists by the Education Department, whilst psychiatrists are employed by Regional Hospital Boards. The co-ordination of these professional skills has proved very valuable in the past and we hope that future Government action on the Health services will maintain the basic frame-work of Clinics, whoever becomes administratively responsible for them."

Summary of work done during 1970

Total number of new referrals			493
Unco-operative	10		
Awaiting appointments	31		
Left District etc.	12		
Total number of new cases seen:			
440 + 14 awaiting appointments from last year		454	
Old cases re-referred for further help		42	
Treatment cases carried forward from previous years		292	
TOTAL CASE LOAD		788	

Sources of referral:		%
Head Teachers	92	(18.6)
Principal School Medical Officer	109	(22.2)
Parents	36	(7.3)
Consultants and Private Doctors	203	(41.2)
Probation Officers	14	(2.8)
Miscellaneous: e.g. Children's Officer, Mental Hospital, Education Welfare Officers, Speech Therapists, N.S.P.C.C., Health Visitors	39	(7.9)
Reasons for referral:		
Difficulties in school—either in specific subjects, general behaviour or general attitude to work	37	(7.5)
Nervous conditions such as night terrors, anxiety conditions, stammering and timidity	117	(23.7)
Behaviour difficulties such as aggressive behaviour, severe temper tantrums, truancy and pilfering	179	(36.3)
Psychosomatic disorders—e.g. asthma, disorders of locomotion, sleep, feeding and evacuation	150	(30.4)
Miscellaneous reasons—vocational guidance, etc.	10	(2.1)

Number of new cases seen by Psychiatrist:			
Diagnostic interviews only (18 passed to psychologists for treatment)	79		
Diagnostic interview and survey (8 passed to psychologists for treatment)	40		
Cases closed during 1970	119		
Taken on for treatment		141	
Treatment load carried forward from previous years		225	
CURRENT TREATMENT LOAD		366	

Number recommended for Maladjusted Schools:	
Trench Hall	16
2 awaiting admission, 3 subsequently settled in ordinary schools; 11 admitted during 1970;	
Independent Schools (1 awaiting admission)	4
Maintained Schools	3
Number recommended for:	
Home Tuition	1
Special Day Unit	2

B.C.G. VACCINATION OF SCHOOL CHILDREN

B.C.G. vaccination against Tuberculosis is available, with parental consent, to:

(a) school children in the year preceding their fourteenth birthday;
(b) children of 14 years and upwards who are still at school and students at universities, teacher training colleges, technical colleges and other establishments for further education and
(c) whole school classes, which may include a few children under 13 years, for convenience.

The following table gives particulars of schools visited for B.C.G. vaccination purposes during 1970, with comparative figures for 1969.

	Maintained and Grant-aided Schools		Independent Schools		Totals	
	1969	1970	1969	1970	1969	1970
Schools visited	48	44	22	13	70	57
Children tested	3,600	3,453*	555	379	4,155	3,832*
Reactors—positive	214	272	44	52	258	324
—negative	3,066	2,763	496	319	3,562	3,082
Not read	320	417*	15	9	335	426*
Children vaccinated	3,023	2,720	489	315	3,512	3,035
Negative reactors not vaccinated	43	43	7	4	50	47

** Of these 165 pupils were tested but not read at one school as they were sent home before the vaccination session commenced as a result of lighting difficulties during Electricity Workers' dispute.*

The following table gives comparative figures in relation to positive reactors found, during the period 1966 to 1970:

Year	Total Read	Positive Reactors	Percentage Positive Reactors
1966 ..	3,893	270	6.94
1967 ..	3,708	193	5.20
1968 ..	3,784	217	5.73
1969 ..	3,820	258	6.75
1970 ..	3,406	324	9.5

Also skin-tested during the year were 136 children who had been given B.C.G. vaccination in the past. Of these, 132 revealed positive reactions, and 4 were negative and given B.C.G. vaccination.

The acceptance rate for B.C.G. vaccination for 1970 was 96.2%.

In addition, a special survey was made at one school where children had been in contact with known cases of Tuberculosis:

	Tested	*Positive Reactors*	*Negative Reactors*
Children (all ages)	277	155	122*

N.B.—These figures are not included in the first of the tables above.

*Of these 24 were pupils under thirteen years of age and, therefore, too young for inclusion in the general scheme for B.C.G. vaccination of school children which was in force in 1970. They will be re-tested when they reach 13 years of age. Of the remaining 98 negative reactors, 81 were given B.C.G. vaccination.

Chest Radiology.—Appointments for chest X-ray are offered to all positive reactors and also to their home contacts. In addition, pupils who have had large Heaf reactions (Grade 3 or 4) have follow-up X-rays four months and sixteen months after their initial chest X-ray. (By the Wolverhampton Chest Radiology Service only, not by the Stoke-on-Trent Service).

During 1970 some 7 children had large positive reactions.

The table below summarises the results of all cases investigated by the Wolverhampton Chest Radiology Unit.

	Pupils	*Home Contacts*	*Staff*
Cases investigated	175	183	–
Recalled for large film examination	1	7	–
Cases of tuberculosis discovered	1	–	–

DIPHTHERIA IMMUNISATION

Routine Medical Examination Sessions in school give the School Medical Officers opportunity to check on the children's state of protection against Diphtheria, to urge the importance of immunisation and to get parent consent to its promotion and maintenance. School Nurses, Health Visitors and District Nurses, who in the course of their duties discover school children who have missed immunisation, also endeavour to obtain the necessary parental "consents". Propaganda methods, including the display of posters, are also used from time to time to remind the public of the importance of immunisation.

During 1970, the total number of children *of school age* who were primarily immunised was 251; of this number 159 were treated by School Medical Officers and 92 by general medical practitioners.

Children immunised against Diphtheria in infancy should have a reinforcing injection after an interval of three or four years and School Medical Officers at routine medical inspections advise this in appropriate cases.

Booster immunisation against diphtheria, tetanus and poliomyelitis and re-vaccination against smallpox is offered to children at school entry (5 years) and excluding diphtheria again to children aged 15 to 19 years on leaving school. Parents have the choice of their children being given the necessary doses either at school or by their family doctors.

Of 4,668 school children given "booster" doses in 1970, some 2,481 were dealt with by the School Medical Officers and 2,187 by general medical practitioners.

The effects of the immunisation campaign are demonstrated by the following table showing the incidence of, and deaths from, Diphtheria among persons of all ages in the County during the past twenty years.

		1951-55	1956-60	1961-65	1966-70
Notifications ..	Total	1	—	1	—
	Annual average	0.2	—	0.2	—
Deaths	Total	1*	—	—	—
	Annual average	0.2	—	—	—

*Death of elderly woman, assigned by Registrar-General ; C. diphtheria not found.

VACCINATION AGAINST SMALLPOX

During the year, 609 children between the ages of 5 and 15 years were vaccinated against Smallpox. Of this number, 105 vaccinations were performed by School Medical Officers and 504 by general medical practitioners.

In addition, 2,548 children were re-vaccinated, 1,514 by School Medical Officers and 1,034 by general practitioners.

VACCINATION AGAINST MEASLES

Children can now be protected against measles by a single injection of a vaccine which may be offered to all children up to 15 years old who have not been protected either by previous immunisation or by an attack of the natural disease.

Vaccination was first offered at the end of May, 1968, to children in the 4 to 7 year age group who were considered to be more at risk. As supplies of the vaccine became more plentiful the scheme was extended to include children aged 1 to 15 years.

Of the 7,973 vaccinated in this latter age group, 3,831 were dealt with by County Council Medical Officers and 4,142 by General Practitioners.

VACCINATION AGAINST POLIOMYELITIS

Some 588 children between the ages of 5 and 15 years received primary vaccination with Sabin (Oral) vaccine during the year and, of these 308 were dealt with by County Council Medical Officers while the remaining 280 received their doses from General Practitioners.

In addition, a further 5,010 children in the same age group were given fourth (or booster) doses 3,045 by County Council Medical Officers and 1,965 by General Practitioners.

IMMUNISATION AGAINST TETANUS

Of the 2,352 children who received primary immunisation against tetanus, 611 were dealt with by School Medical Officers and the remaining 1,741 by general practitioners. Of a further 7,075 children who received booster doses of tetanus antigen some in conjunction with diphtheria boosters by means of combined vaccines, 3,608 were immunised by School Medical Officers and 3,467 by Practitioners.

VACCINATION AGAINST RUBELLA (GERMAN MEASLES)

In July, 1970, the Department of Health and Social Security recommended that vaccination against Rubella should be offered to all girls between their eleventh and fourteenth birthdays but that initially priority should be given to older girls, i.e. those aged thirteen years. The purpose is to protect these girls against rubella (universally recognised as a major threat to women of child-bearing potential because of its disastrous consequences in pregnancy) before they reach child-bearing age, without attempting to reduce the incidence of natural rubella infection in younger children.

The campaign in Shropshire was started in early September. Parents were given the choice of arranging for this vaccination to be given either by their own doctor or by one of the Council's medical officers. Details were publicised and the parents of 759 children applied for the vaccination to be carried out. Of this total 738 were dealt with by County Council Medical Officers and 21 by General Practitioners.

HEALTH EDUCATION

In this County and until quite recently health education was given in schools on request and on acceptance, and in the form of talks, mainly by medical officers, on health matters selected from lists of given topics or specifically asked for by schools having special problems or by individual Heads who felt that instruction on various health matters was necessary or desirable in their schools. The talks were generally illustrated by films, slides, strips, or other visual media and they were offered both by letters sent at the initiation of medical inspections and by advertisement in "Education Notes" addressed to schools by the Director of Education. Initially at any rate, they were something of a by-product—a means of utilising the odd hour or so of available medical officers' time at the close of a routine inspection together with an opportunity of propagating information that could serve some useful purpose in the field of preventive medicine.

These in the last decade were the tentative beginnings of our present growing service. Over the years the variety of talks has been developed to meet ascertained needs. Our relationships with school staffs have deepened, widened and are continuously improving. With an increased headquarters staff of health educators we have been able to maintain and extend our circles of influence. The tendency is for lectures and series of lectures to be more and more readily available at the times when schools can best fit them into their curricula, and for more and more attention to be given to the requirements of school-leavers, who need information on problems connected with sex, personal relationships, environment and social adjustment, the basic biology of health (mental, physical, social), good and bad health practices, the common dangers, the evils attendant upon misuse of or addiction to drugs, tobacco, alcohol, and the hazards of too ready acceptance of the apparent standards of what is loosely termed "the permissive society".

This is an extremely wide and important field of endeavour. It is a field that we cannot hope to cultivate by our own exclusive efforts and it is a measure of our success that we are increasingly able to enlist the help and co-operation of our colleagues in the teaching profession first in requesting our specialist endeavours, secondly in the reinforcement and follow-up operations, and thirdly in subsequent visits to revise previously given lectures or courses and to repeat them for succeeding generations of pupils.

During the year,496 talks were given to schools and their allied audiences of parents, to parents and pupils in Pre-School Playgroups, and to students of a teacher-training college. We gave talks to a total audience of 29,016, comprising 21,246 individual persons, from 155 groups. This represents a slightly increased number of talks to a somewhat larger overall audience than those of the previous year.

Talks were given by 9 Medical Officers, 14 Health Visitors, 3 Dental Hygienists, the Senior Speech Therapist/Audiologist, a chiropodist and the four members of the full-time Health Education staff.

In schools and for related audiences the specific subjects most in demand were Personal Relationships (sex differences and related matters), Addiction (smoking, drugs, alcohol), Home Safety. The year was marked by a considerable increase in the number of Dental Health talks and in the numbers of individuals who received them. These increases reflect the potential scope of other aspects of health education, notably in Primary Schools, if there were a sufficient number of competent staff available to visit schools, interview Heads in person and undertake more intensive courses of health education.

Smoking and Health.—Nine talks on smoking were given on request in nine schools to total audiences of 1,544 pupils. There was a continuing interest in the theme of Drugs and Addiction. It is our endeavour to present factual information on the effects of smoking, misuse of drugs, the dangers of taking alcohol in conjunction with medically-prescribed drugs, more especially as

regards motor vehicles, and the condition of the alcoholic. Statistics indicate that the impressive incidence of lung cancer is closely linked with the use of tobacco and medical evidence suggests that there are links (less demonstrable perhaps) between the incidence of chronic bronchitis and diseases of the heart and circulatory systems and the prevalence of the tobacco habit. It is encouraging to observe that in the teaching profession a remarkably high proportion of school staffs seem to be composed either of non-smokers or of ex-smokers. This is evidence that medical research and health propaganda are not without their effect. It is less encouraging to discover that pupils of fourteen years may be smoking as many as twenty cigarettes a day.

Statistical Tables.—These indicate the nature and scope of health education in schools. They cannot give a true indication of the extent of health education by school staffs independently of our own health education service nor of the integration that exists between very many of the schools and the Health and Education Departments in the health education field.

TALKS IN SCHOOLS AND TO ALLIED GROUPS

School/Group	Numbers	Talks	Numbers in Audiences
Primary Schools	82	125	9,737
Secondary Schools	30	243	10,347
Further	3	14	364
Parent/Teacher	24	24	380
Playgroup Parents	10	10	369
Training Centres			
Adult	2	63	46
Junior (Staffs)	1	17	3
TOTALS	152	496	21,246

SUBJECTS OF TALKS IN SCHOOLS AND ALLIED GROUPS

Subject	Visual Aids		Without Visuals	
	Groups	Audience	Groups	Audiences
Audiology	5	169		
Addiction (Smoking, Drugs, Alcohol)	38	3,785	5	30
Learning to Live / Venereal Diseases / Family Planning	92	2,666	44	*
Menstruation	6	590		
Food and Nutrition	14	1,419		
General Health	139	8,453	2	24
Home and General Safety	21	2,268		
First Aid	2	80	1	6
Dental Health	82	7,671		
Foot Health	3	13		
Parentcraft	37	1,125	1	22
Environment and Pollution	4	180		
Miscellaneous	1	180	1	35
TOTALS	444	28,599	54	117

** Figure not available*

Note:— In the first table the audience total relates to individuals receiving talks—possibly more than one in a series. In the second table the audiences are total numbers of persons receiving the individual talks.

H. HARRIS,
Health Education Officer.

PHYSICAL EDUCATION

The following report has been provided by Mr. J. W. Beswick, Physical Education Adviser:

Shropshire Schools' Field Study and Adventure Centre.—The year 1969/70 saw the permanent accommodation in the Centre being in full use for fifty two weeks of the year.

Forty eight schools used the Centre, in addition to courses for two groups of teachers and two courses for outside bodies.

The Centre's working accommodation is to be increased this year with the addition of a Library and Laboratory, for field study and environmental work. Parity should now be able to be arranged between courses for pure field study and total adventure.

Many experimental periods have been used this year in order that an efficient pattern for the future may be established.

Swimming.—Swimming continued under the same terms as the previous year, i.e. two term's swimming in closed pools, 1½ term's swimming in open heated pools.

More school children were enabled to attend baths as Bridgnorth and Church Stretton were brought into full use this year.

New covered baths are in the course of completion and will be in full use for the 1971 season. Towards the end of August the new baths at Madeley Educational and Recreational Centre should be in full use.

Shropshire Schools' Sports and Athletics Association.—This body has now 31 facets of sport under its jurisdiction and events continue to be held at area, county, inter-county, and national levels. The performances of the Shropshire County Team in the various national events improved last year over previous years.

Duke of Edinburgh's Award.—The number of boys and girls in this scheme this year is:

Boys	563
Girls	353

133 boys gained awards and 7 boys went to Buckingham Palace.

56 girls gained awards and 3 went to Buckingham Palace.

SCHOOL CANTEENS

Medical Examination of Staff.—In order to ensure as far as possible that those engaged in the School Meals Service are not suffering from, or carriers of, infectious diseases liable to be transmitted by contamination of the food served in the canteens, the medical examination of canteen staffs is carried out at least once a year, and new entrants to the service are examined as soon as possible and also given chest X-ray examinations. They should be examined *before* commencing employment; often the worker's services are urgently required and prior examination is not considered possible, but this is potentially dangerous practice.

These medical examinations are directed towards establishing the cleanliness of the person, clothing and hands of those employed in the preparation or handling of food; and the absence of infectious conditions such as septic skin lesions, discharging ears and chronic catarrh and other conditions such as eczema or other forms of dermatitis.

If on initial examination as employee is found to have a history or shows symptoms of intestinal disorder, arrangements are made for specimens of faeces, and if necessary urine, to be submitted to the Public Health Laboratory, Shrewsbury, for investigation.

The following particulars give some indications of this work during the year:

KITCHENS AND SCHOOL CANTEENS

Premises		Personnel Employed				
		Supervisors	Cooks	Helpers	Others	Total
Central Kitchens ..	10	8	10	91	10	119
Self-contained Canteens	185	7	180	817	532	1,536
Canteens for dining only	96	—	—	241	200	441
TOTALS ..	291	15	190	1,149	742	2,096

During 1970 a total of 1,416 examinations of canteen personnel (311 initial and 1,105 re-examinations) was carried out.

In three cases it was necessary to arrange for special chest X-ray examinations and the results in all cases were satisfactory. Chest X-ray examinations are made when the Chest Radiology Unit is in the area or can be arranged specially at the request of the Medical Officer.

This scheme has been extended to include personnel engaged in the preparation and handling of foodstuffs at the Boarding Schools and Hostels in the County.

In addition, during 1970 Medical Officers carried out a total of 35 medical examinations of kitchen staff employed in Welfare Homes in the County.

SANITARY CIRCUMSTANCES OF THE SCHOOLS

On the occasion of each annual routine medical inspection the premises are re-inspected by the School Medical Officer and matters which require attention or investigation are referred to the Chief Education Officer with a view to their being dealt with by the Education Works Committee.

GENERAL

Meals.—School canteen meals are available at 9p per head (free in necessitous cases) for one hundred per cent of children attending school. The charge will be increased to 12p at the beginning of Summer Term, 1971. 81.4 per cent were having school dinners at a census taken in September, 1970; in September, 1969, the figure was 81.6 per cent.

Milk.—Milk is supplied free of charge in all Primary maintained schools and a census taken in September, 1970, showed that 85.7 per cent of the children attending Primary maintained schools were drinking it.

Quality of Milk Supplies.—As far as possible only Pasteurised Milks are supplied; of a total of 233 departments in Primary maintained schools, 232 had pasteurised supplies and 1 an untreated supply in 1970.

Investigation of Milk Supplies.—The County Public Health Inspectors are responsible for the supervision of school milk supplies and samples for testing are obtained by Sampling Officers of the County Health Department. Methylene Blue colour tests to determine the keeping quality and, in the case of Pasteurised milk. Phosphatase tests to determine whether the milk has been properly processed, are carried out on milk from each supplier at regular intervals.

The table below gives the results of the examination of samples taken during 1970.

Grade of Milk	Samples taken	Methylene Blue Test			Phosphatase Test	
		Satisfactory	Unsatisfactory*	Void†	Satisfactory	Unsatisfactory
Pasteurised	142	122	5	15	142	—
Untreated	5	5	—	—	—	—
TOTAL ..	147	127	5	15	142	—

*In the cases of the samples failing the Methylene Blue Test, "on delivery" samples were obtained and warning letters were sent to the Dealers concerned.

†Methylene Blue Tests are declared void when the atmospheric shade temperature exceeds 70°F. during storage in the laboratory.

Medical Examination of Prospective Teachers.—During 1970 the medical staff of the School Health Service examined 392 candidates for entry to the teaching profession.

SURVEY OF PHYSICALLY HANDICAPPED CHILDREN IN ORDINARY SCHOOLS:

At the request of the Department of Education and Science, a survey was carried out on a countrywide basis to obtain up-to-date information regarding physically handicapped children in attendance at ordinary schools.

The objects of this survey were to ascertain:—

(a) The number of physically handicapped children attending ordinary schools,
(b) The nature and degree of their handicap,
(c) Whether they absorbed too much of the teachers' time at the expense of non-handicapped children,
(d) Whether they were deriving at least as much educational benefit and receiving as much medical and nursing attention as they would in special schools.

The survey involved the completion of two questionnaires, one in respect of each maintained school having physically handicapped pupils on the roll, and the other completed for each child known to be handicapped. Comprehensive information was required concerning the nature of the handicap, forms of treatment undertaken, special provisions for education in school, etc.

The survey commenced early in 1970 and was completed at the end of the summer term. It involved the visiting by School Medical Officers of some 280 schools in the county and interviews with both teaching staff and pupils. A previous survey of this nature took place some eighteen years ago. Since that time there has been a big reduction in the number of children suffering from certain conditions such as rheumatic heart disease, tuberculosis of bones and joints, paralysis following poliomylitis, and osteo-myelitis, but a substantial increase in the number with myelomeningocele.

It is anticipated that the results of this study will be published in due course by the Department of Education and Science.

STATISTICAL TABLES

(i.e. as submitted to the Department of Education and Science on Form 8.M).

TABLE I (A) PERIODIC MEDICAL INSPECTIONS

Age Groups inspected (By year of birth)	Number of Pupils Inspected	Physical Condition of pupils inspected (nutrition)		Pupils found to require treatment (excluding dental diseases and infestation with vermin)		
		Satisfactory	Un-Satisfactory	For defective vision (excluding squint)	For any other condition recorded at Part II	Total individual pupils
		No.	No.			
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1966 and later ..	16	16	—	1	1	2
1965	1,229	1,229	—	23	51	67
1964	2,269	2,269	—	50	79	116
1963	1,383	1,383	—	19	27	43
1962	346	346	—	4	12	15
1961	222	222	—	2	5	6
1960	154	154	—	3	2	5
1959	108	108	—	4	3	7
1958	375	375	—	7	18	23
1957	292	292	—	10	4	14
1956	256	256	—	5	15	20
1955 and earlier ..	431	431	—	22	22	41
TOTAL ..	7,081*	7,081	—	150	239	359

* In addition 4,167 pupils were discussed and found not to warrant routine medical examination, 1,959 in 11 year age group and 2,208 in 14 year age group.

NOTE: (i) Routine medical examinations are normally carried out on entry to school only.

(ii) Columns 5, 6 and 7 relate to individual pupils and not to defects. Consequently the total in column (7) is not necessarily the sum of columns (5) and (6).

(B) OTHER INSPECTIONS

Special Inspections	1,523
Re-inspections	9,149
	10,672 *

*In addition to those inspected a total of 4,494 pupils in 7 and 11 year old groups were given Vision tests. Of this total 145 were recommended for treatment and 267 for observation.

Also approximately 700 visits per annum are made by School Medical Officers to the homes of handicapped pupils for special examination, re-examination and parent guidance purposes, etc.

(C) INFESTATION WITH VERMIN

(1)	Total number of examinations in the schools by the School Nurses or other authorised persons ..	83,310
(2)	Total number of individual pupils found to be infested	659
(3)	Number of individual pupils in respect of whom cleansing notices were issued (Section 54(2), Education Act, 1944)	16
(4)	Number of individual pupils in respect of whom cleansing orders were issued (Section 54(3), Education Act, 1944)	–

RETURN OF DEFECTS FOUND BY MEDICAL INSPECTIONS IN THE YEAR ENDED 31st DECEMBER, 1970

TABLE II — PERIODIC AND SPECIAL INSPECTIONS

Defect Code No.	Defect or Disease	Entrants		Leavers		Others		Total		Special inspections	
		Requiring:		Requiring:		Requiring:		Requiring:		Requiring:	
(1)	(2)	Treatment (3)	Observation (4)	Treatment (5)	Observation (6)	Treatment (7)	Observation (8)	Treatment (9)	Observation (10)	Treatment (11)	Observation (12)
4	Skin	15	109	10	32	15	106	40	247	29	24
5	Eyes (*a*) Vision	74	554	27	168	49	514	150	1,236	15	128
	(*b*) Squint	32	100	–	9	8	81	40	190	1	26
	(*c*) Other	1	18	–	–	1	20	2	38	1	9
6	Ears (*a*) Hearing	12	306	2	27	9	193	23	526	26	61
	(*b*) Otitis Media ..	1	102	3	13	7	57	11	172	1	21
	(*c*) Other	3	54	7	8	1	46	11	108	2	11
7	Nose or Throat	18	306	4	37	6	228	28	571	13	54
8	Speech	15	82	–	4	7	30	22	116	27	26
9	Lymphatic Glands.. ..	2	93	–	4	1	54	3	151	–	15
10	Heart	6	60	–	8	1	41	7	109	–	9
11	Lungs	10	135	–	18	3	96	13	249	2	30
12	Development :										
	(*a*) Hernia	9	26	–	–	1	8	10	34	–	1
	(*b*) Other	6	181	3	17	6	91	15	289	3	36
13	Orthopaedic :										
	(*a*) Posture	–	41	1	5	–	37	1	83	–	23
	(*b*) Feet	8	132	5	30	2	96	15	258	2	24
	(*c*) Other	2	75	2	19	4	47	8	141	2	17
14	Nervous System :										
	(*a*) Epilepsy	–	14	–	5	–	17	–	36	–	4
	(*b*) Other	–	27	–	7	–	18	–	52	–	11
15	Psychological :										
	(*a*) Development ..	1	57	–	18	2	49	3	124	1	71
	(*b*) Stability ..	4	106	–	12	–	63	4	181	1	48
16	Abdomen	3	59	1	5	1	31	5	95	–	21
17	Other	5	80	4	40	7	96	16	216	3	35

TABLE III — (A) EYE DISEASES, DEFECTIVE VISION AND SQUINT

	Number of cases dealt with
External and other, excluding errors of refraction and squint	6
Errors of refraction (including squint)	4,944
TOTAL ..	4,950
Number of pupils for whom spectacles were prescribed	4,829

(B) DISEASES AND DEFECTS OF EAR, NOSE AND THROAT

	Number of cases dealt with
Received operative treatment :	
(*a*) for diseases of the ear	21
(*b*) for adenoids and chronic tonsillitis	546
(*c*) for other nose and throat conditions ..	14
Received other forms of treatment	56
TOTAL ..	637
Total number of pupils in schools who are known to have been provided with hearing aids : (*a*) in 1970	45
(*b*) in previous years	120

(C) ORTHOPAEDIC AND POSTURAL DEFECTS

	Number of cases dealt with
Number of pupils known to have been treated at clinics or out-patients departments ..	150
Number of pupils treated at school for postural defects	—
TOTAL ..	150

(D) DISEASES OF THE SKIN (excluding Uncleanliness, for which see Part C of Table I)

	Number of defects treated or under treatment during year
Ringworm : (i) Scalp	2
(ii) Body	2
Scabies	31
Impetigo	20
Other skin diseases	9
TOTAL ..	64

(E) CHILD GUIDANCE TREATMENT

Number of pupils treated at Child Guidance Clinics under arrangements made by the Authority ..	788

(F) SPEECH THERAPY

Number of pupils treated by Speech Therapists	802

(G) OTHER TREATMENT GIVEN

	Number of cases dealt with
(*a*) Miscellaneous Minor Ailments	22
(*b*) Pupils who received convalescent treatment under School Health Service arrangements ..	–
(*c*) Pupils who received B.C.G. Vaccination ..	3,035
(*d*) Other treatment given :	
Appendicitis	6
Asthma	16
Bronchitis	2
Cardiac Conditions	7
Diabetes	10
Epilepsy	5
Hernia	5
Meningitis	4
Nephritis	3
Tubercular Conditions	6
Miscellaneous	146
TOTAL (*a*)—(*d*) ..	3,267